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(FILE 'HOME' ENTERED AT 06:14:51 ON 04 NOV 1999) /

FILE 'REGISTRY' ENTERED AT 06:15:15 ON 04 NOV 1999 /

FILE 'HCAPLUS' ENTERED AT 06:15:19 ON 04 NOV 1999

L1 439214 S RESIN

L2 5367 S SOLID SUPPORT

L3 9087 S SOLID(2A) PHASE(2A) SYNTHES?

L4 3826 S L1 AND (L2 OR L3)

FILE 'REGISTRY' ENTERED AT 06:17:51 ON 04 NOV 1999

FILE 'HCAPLUS' ENTERED AT 06:17:59 ON 04 NOV 1999

SET SMARTSELECT ON

L5 SEL L4 1- RN : 50255 TERMS

SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 06:22:47 ON 04 NOV 1999

L6 50216 S L5

FILE 'HCAPLUS' ENTERED AT 06:31:09 ON 04 NOV 1999

SET SMARTSELECT ON

L7 SEL L4 3479- RN : 1830 TERMS

SET SMARTSELECT OFF

FILE 'REGISTRY' ENTERED AT 06:31:40 ON 04 NOV 1999

L8 1827 S L7

L9 51442 S L6 OR L8

L10 45025 S L9 AND N/ELS

L11 44448 S L10 AND (O/ELS OR N>1)

ACT MCCAR122/A

L12 STR

L13 STR L12

L14 47 S L13 SSS SAM SUB=L11

L15 909 S L13 SSS FUL SUB=L11

FILE 'HCAPLUS' ENTERED AT 06:36:13 ON 04 NOV 1999

L16 16904 S L15

L17 293 S L16 AND L4

6 S L16(L)L2

L18 55 S L16(L)L3

L19 61 S L18 OR L19

L20 56 S L20 AND L1

L21 1141 S L15/P

L22 52 S L21 AND L22

FILE 'CAOLD' ENTERED AT 06:47:20 ON 04 NOV 1999

L24 0 S L21

=> d que 115

L1 439214 SEA FILE=HCAPLUS ABB=ON PLU=ON RESIN
L2 5367 SEA FILE=HCAPLUS ABB=ON PLU=ON SOLID SUPPORT
L3 9087 SEA FILE=HCAPLUS ABB=ON PLU=ON SOLID(2A)PHASE(2A)SYNTHESES?
L4 3826 SEA FILE=HCAPLUS ABB=ON PLU=ON L1 AND (L2 OR L3)
L5 SEL PLU=ON L4 1- RN : 50255 TERMS (TERM LIMIT EXCEED
ED)
L6 50216 SEA FILE=REGISTRY ABB=ON PLU=ON L5
SEL PLU=ON L4 3479- RN : 1830 TERMS
L7 1827 SEA FILE=REGISTRY ABB=ON PLU=ON L7
L8 51442 SEA FILE=REGISTRY ABB=ON PLU=ON L6 OR L8
L9 45025 SEA FILE=REGISTRY ABB=ON PLU=ON L9 AND N/ELS
L10 44448 SEA FILE=REGISTRY ABB=ON PLU=ON L10 AND (O/ELS OR N>1)
L13 STR

PRO

5

G2

::|

G1-* NH=C
1 2 3

VAR G1=NH/O

VAR G2=O/S/N

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

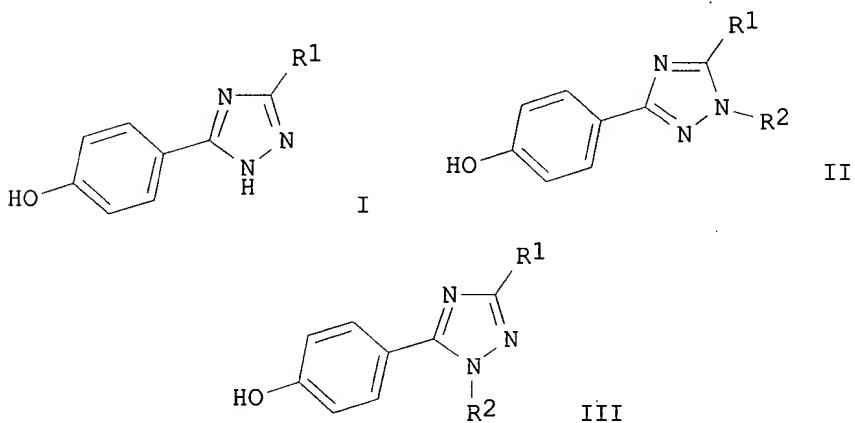
NUMBER OF NODES IS 4

STEREO ATTRIBUTES: NONE

L15 909 SEA FILE=REGISTRY SUB=L11 SSS FUL L13

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L23 ANSWER 1 OF 52 HCPLUS COPYRIGHT 1999 ACS
AN 1999:596207 HCPLUS
TI Synthesis of 1,2,4-Triazole-Functionalized Solid Support and Its Use in
the Solid-Phase Synthesis of Trisubstituted 1,2,4-Triazoles
AU Katritzky, Alan R.; Qi, Ming; Feng, Daming; Zhang, Guifeng; Griffith,
Michael C.; Watson, Karen
CS Center for Heterocyclic Compounds Department of Chemistry, University of
Florida, Gainesville, FL, 32611-7200, USA
SO Org. Lett. (1999), 1(8), 1189-1191
CODEN: ORLEF7; ISSN: 1523-7060
PB American Chemical Society
DT Journal
LA English
GI



AB 1,2,4-Triazoles I-III (R1 = Ph, 3-O2NC6H4, Me; R2 = Bu, i-Pr, cyclopentyl, allyl, PhCH₂, 2-octyl, 1-phenylethyl, cyclopropylmethyl) were synthesized on Wang **resin** solid support in three steps with excellent yields and purities. The utility of this triazole-functionalized solid support was demonstrated by the solid-phase synthesis of various trisubstituted 1,2,4-triazoles.

IT INDEXING IN PROGRESS

IT 5351-23-5DP, 4-Hydroxybenzoic acid hydrazide, polymer bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. of a triazole-functionalized Wang **resin solid**
support from Me hydroxybenzoate and amidines and its use in
prep. trisubstituted triazoles)

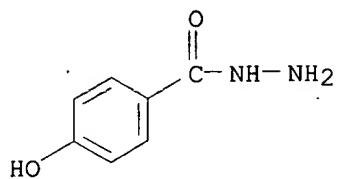
RN 5351-23-5 HCAPLUS

CN Benzoic acid, 4-hydroxy-, hydrazide (9CI) (CA INDEX NAME)

McCarthy

09/122576

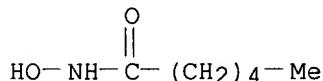
Page 4



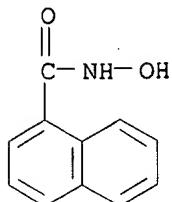
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L23 ANSWER 2 OF 52 HCPLUS COPYRIGHT 1999 ACS
 AN 1999:451277 HCPLUS
 DN 131:87512
 TI Solid-support synthesis of hydroxamic acids using **resins** with oxime moieties
 IN Golebiowski, Adam; Klopfenstein, Sean Rees
 PA The Procter & Gamble Company, USA
 SO PCT Int. Appl., 14 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

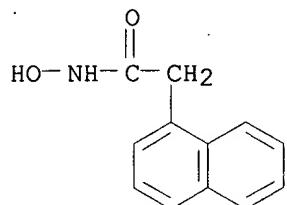
| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 9935126 | A1 | 19990715 | WO 1998-IB2117 | 19981228 |
| | W: AU, CA, IL, JP, NO, NZ, US | | | | |
| | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| PRAI | US 1998-70980 | | 19980109 | | |
| OS | CASREACT 131:87512 | | | | |
| AB | Hydroxamic acids are prepd. in high yield and selectivity using a solid-support resin having an oxime moiety as the linking moiety [where the functional moiety attached to the polymer backbone is 4-C6H4C(:NOH)C6H4NO2-4'] by: (A) condensing the resin with a carboxylic acid (e.g., 2-furoic acid) to form a bound oxime ester; (B) optionally modifying the side chain; (C) cleaving a product from the resin by reaction with Me3CSi(Me)2ONH2; (D) optionally modifying the side chain; and (E) optionally treating the resulting O-TBS-protected material RCONHSi(Me)2CMe3 (R = 2-furyl) with acid (e.g., trifluoroacetic acid) to produce an unprotected hydroxamic acid RCONHOH. | | | | |
| IT | 4312-93-0P 6953-61-3P 10335-80-5P 10507-69-4P 17698-14-5P 31982-81-7P 208924-63-4P 208924-64-5P | | | | |
| | RL: SPN (Synthetic preparation); PREP (Preparation) (solid-support synthesis of hydroxamic acids using resins with oxime moieties) | | | | |
| RN | 4312-93-0 HCPLUS | | | | |
| CN | Hexanamide, N-hydroxy- (9CI) (CA INDEX NAME) | | | | |



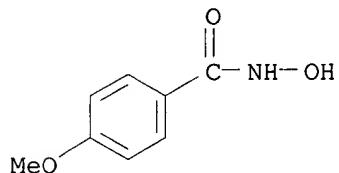
RN 6953-61-3 HCPLUS
 CN 1-Naphthalenecarboxamide, N-hydroxy- (9CI) (CA INDEX NAME)



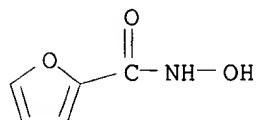
RN 10335-80-5 HCAPLUS
CN 1-Naphthaleneacetamide, N-hydroxy- (9CI) (CA INDEX NAME)



RN 10507-69-4 HCAPLUS
CN Benzamide, N-hydroxy-4-methoxy- (9CI) (CA INDEX NAME)

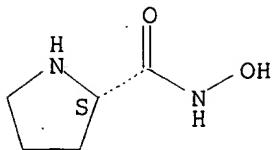


RN 17698-14-5 HCAPLUS
CN 2-Furancarboxamide, N-hydroxy- (9CI) (CA INDEX NAME)



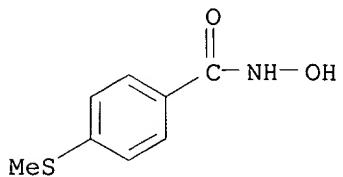
RN 31982-81-7 HCAPLUS
CN 2-Pyrrolidinecarboxamide, N-hydroxy-, (2S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



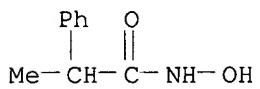
RN 208924-63-4 HCPLUS

CN Benzamide, N-hydroxy-4-(methylthio)- (9CI) (CA INDEX NAME)



RN 208924-64-5 HCPLUS

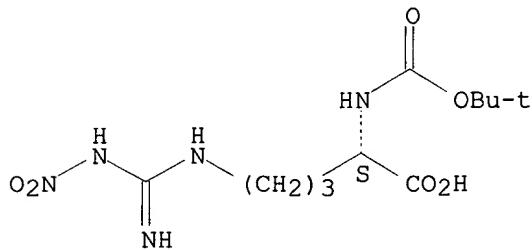
CN Benzeneacetamide, N-hydroxy-.alpha.-methyl- (9CI) (CA INDEX NAME)



=> d bib abs hitstr 3

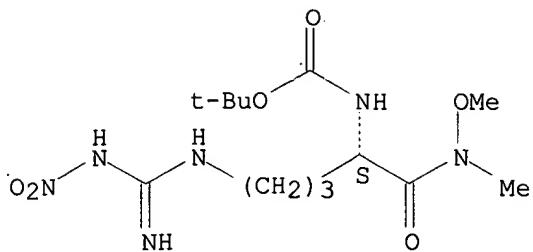
L23 ANSWER 3 OF 52 HCAPLUS COPYRIGHT 1999 ACS
 AN 1999:440760 HCAPLUS
 DN 131:199967
 TI Novel protocol for the solid-phase synthesis of peptidyl and peptidomimetic P1-argininal derivatives
 AU Siev, Daniel V.; Gaudette, John A.; Semple, J. Edward
 CS Department of Medicinal Chemistry, Corvas International, Inc., San Diego, CA, 92121, USA
 SO Tetrahedron Lett. (1999), 40(28), 5123-5127
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 131:199967
 AB The design, synthesis and application of novel argininal aminals tethered onto AM **resin** is described.. Efficient solid-phase synthesis routes to a wide array of the title derivs. have been implemented using this convenient technol. The resulting P1-argininal targets serve as useful exploratory scaffolds for serine and cysteine protease inhibitor discovery.
 IT 2188-18-3
 RL: RCT (Reactant)
 (**solid-phase synthesis** of peptidyl and peptidomimetic P1-argininal derivs.)
 RN 2188-18-3 HCAPLUS
 CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 139976-34-4P 186261-75-6P 241146-46-3P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (**solid-phase synthesis** of peptidyl and peptidomimetic P1-argininal derivs.)
 RN 139976-34-4 HCAPLUS
 CN Carbamic acid, [(1S)-4-[[imino(nitroamino)methyl]amino]-1-[(methoxymethylamino)carbonyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

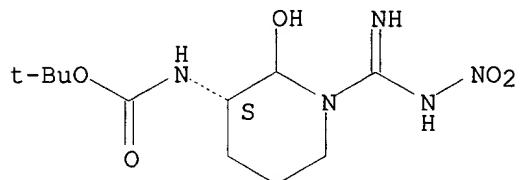
Absolute stereochemistry.



RN 186261-75-6 HCAPLUS

CN Carbamic acid,
[(3S)-2-hydroxy-1-[imino(nitroamino)methyl]-3-piperidinyl]-
, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 241146-46-3 HCAPLUS

CN Hexanoic acid, 6-[(3S)-3-[(1,1-dimethylethoxy)carbonyl]amino]-1-[imino(nitroamino)methyl]-2-piperidinyl oxy-, ethyl ester (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

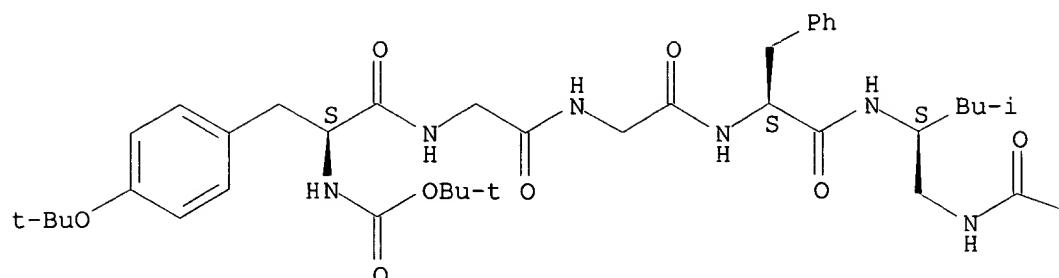
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L23 ANSWER 4 OF 52 HCPLUS COPYRIGHT 1999 ACS
AN 1999:421636 HCPLUS
DN 131:73978
TI Solid phase synthesis of amino acid and peptide substituted diamines
IN Pongor, Sandor; Zahariev, Sotir; Guarnaccia, Corrado
PA International Centre for Genetic Engineering and Biotechnology, Italy
SO PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

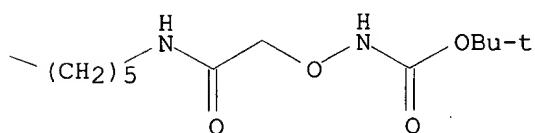
| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| PI WO 9932428 | A2 | 19990701 | WO 1998-EP8415 | 19981222 |
| WO 9932428 | A3 | 19990910 | | |
| W: CA, US | | | | |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| PRAI GB 1997-27123 | | 19971222 | | |
| OS CASREACT 131:73978; MARPAT 131:73978 | | | | |
| AB Diamines of formula R5R2NCHR1-R3-CH2NHR4 [R1 = H, alkyl, (un)substituted amino acid side chain; R2 = H, alkyl; or R1 and R2 together with the atoms | | | | |
| to which they are bonded form a heterocyclic ring; R3 = C1-10 alkylene group, bond; R4 and R5 independently = H, a nitrogen protecting group, an amino acid, an amino acid deriv., a peptide chain, or a detectable label] were prepd. using a solid phase method which comprises: (i) reacting an N-protected amino aldehyde with an amino group attached to a solid resin to produce a resin -bound enamine product and (ii) reducing the enamine product to produce a resin -bound N-protected diamine. The resin bound diamine may be further modified, e.g., by further protection, reaction with an amino acid or by carrying out solid phase peptide synthesis to provide a peptide bonded at its C-terminus to a diamine moiety. The method was applied to the synthesis of C-terminal modified analogs of human calcitonin (28-32) and Leu-enkephalin, e.g. H-Tyr-Gly-Gly-Phe-Leu.psi.[CH2NH(Dns-Ahx)] (Dns = dansyl, Ahx = amino hexanoic acid). | | | | |
| IT 228715-25-1P | | | | |
| RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) | | | | |
| (solid phase synthesis of amino acid and peptide substituted diamines) | | | | |
| RN 228715-25-1 HCPLUS | | | | |
| CN L-Phenylalaninamide, N-[(1,1-dimethylethoxy)carbonyl]-O-(1,1- dimethylethyl)-L-tyrosylglycylglycyl-N-[(1S)-17,17-dimethyl-1-(2- methylpropyl)-4,11,15-trioxa-13,16-dioxa-3,10,14-triazaoctadec-1-yl]- (9CI) (CA INDEX NAME) | | | | |

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

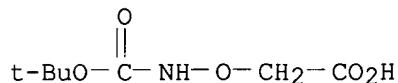


IT 42989-85-5

RL: RCT (Reactant)

(solid phase synthesis of amino acid and
peptide substituted diamines)

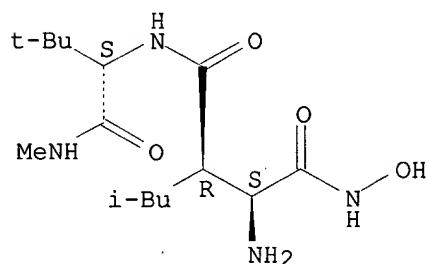
RN 42989-85-5 HCPLUS

CN Acetic acid, [[[[(1,1-dimethylethoxy)carbonyl]amino]oxy]- (9CI) (CA INDEX
NAME)

=> d bib abs hitstr 5

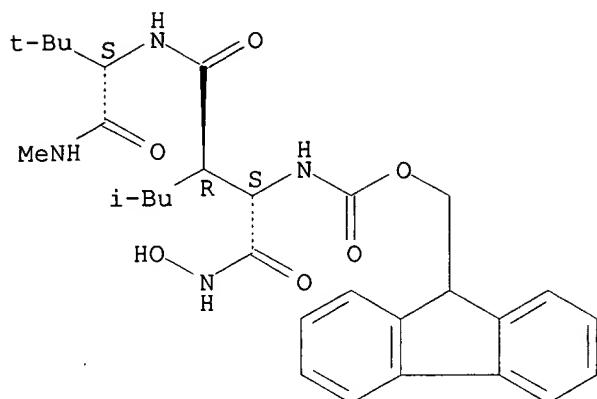
L23 ANSWER 5 OF 52 HCPLUS COPYRIGHT 1999 ACS
 AN 1999:368457 HCPLUS
 DN 131:130276
 TI Solid-phase synthesis of hydroxamic acid based TNF-.alpha. convertase inhibitors
 AU Barlaam, Bernard; Koza, Patrice; Berriot, Julien
 CS Zeneca Pharma, Centre de Recherches, Z.I. La Pompelle, Reims, 51689, Fr.
 SO Tetrahedron (1999), 55(23), 7221-7232
 CODEN: TETRAB; ISSN: 0040-4020
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 AB An acid-sensitive linker for the solid phase synthesis of hydroxamic acids is described. Hydroxamic acid-based TNF.alpha. inhibitors have been prep'd. by solid phase synthesis. Derivatization of N2-[4-(N-oxyamino)-2R-isobutyl-3S-aminosuccinyl]-L-tert-leucine-N1-methylamide grafted on Sasrin resin and subsequent acidic cleavage afforded hydroxamic acids in good yields and with good purity.
 IT 204126-51-2DP, resin-bound 233749-18-3DP, resin-bound 233749-19-4P 233749-49-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation) (solid-phase synthesis of hydroxamic acid based TNF-.alpha. convertase inhibitors)
 RN 204126-51-2 HCPLUS
 CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 233749-18-3 HCPLUS
 CN L-Valinamide, (3R)-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

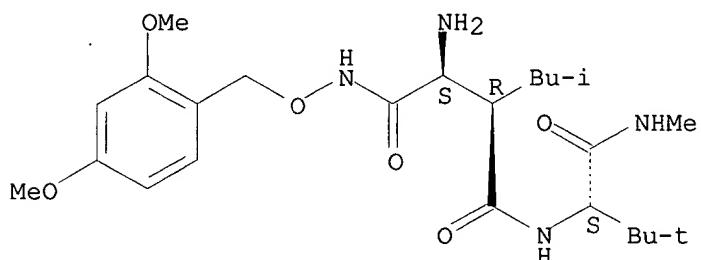
Absolute stereochemistry.



RN 233749-19-4 HCPLUS

CN L-Valinamide, (3R)-N-[(2,4-dimethoxyphenyl)methoxy]-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

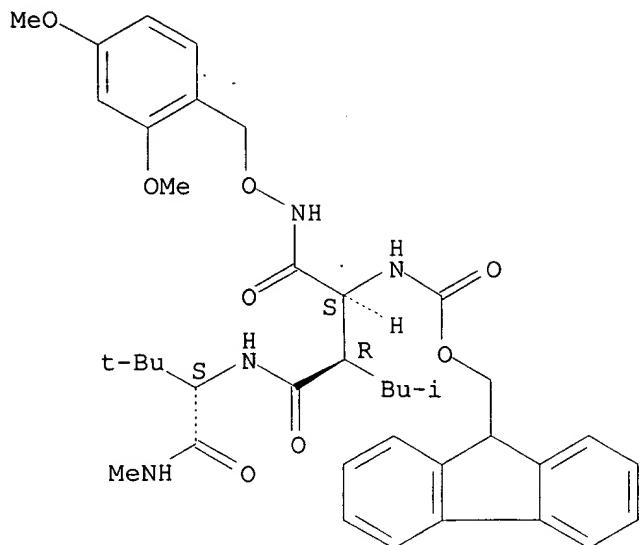
Absolute stereochemistry.



RN 233749-49-0 HCPLUS

CN L-Valinamide, (3R)-N-[(2,4-dimethoxyphenyl)methoxy]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



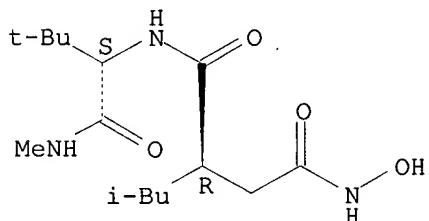
IT 145337-55-9P 204126-51-2P 233749-18-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of hydroxamic acid based TNF-.alpha. convertase inhibitors)

RN 145337-55-9 HCPLUS

CN Butanediamide, N1-[(1S)-2,2-dimethyl-1-[(methylamino)carbonyl]propyl]-N4-hydroxy-2-(2-methylpropyl)-, (2R)- (9CI) (CA INDEX NAME)

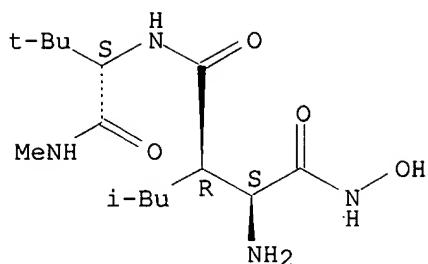
Absolute stereochemistry.



RN 204126-51-2 HCPLUS

CN L-Valinamide,
(3R)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl-L- (9CI) (CA INDEX NAME)

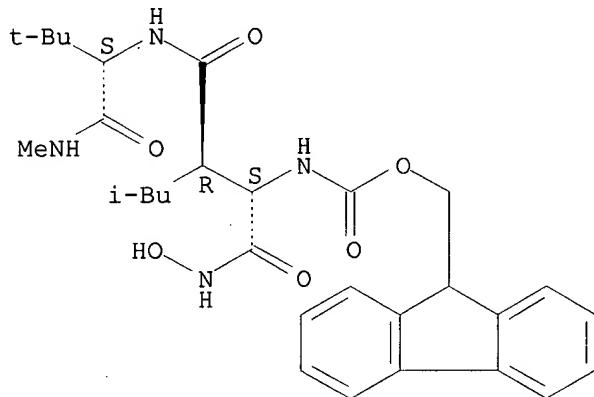
Absolute stereochemistry.



RN 233749-18-3 HCPLUS

CN L-Valinamide, (3R)-N2-[(9H-fluoren-9-ylmethoxy) carbonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



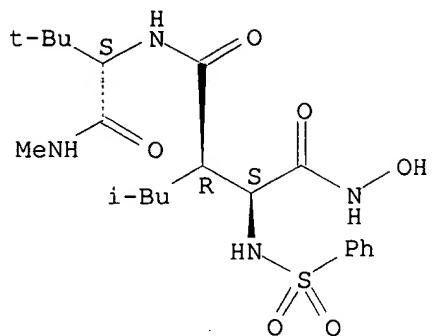
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 233749-28-5P 233749-29-6P 233749-30-9P
 233749-31-0P 233749-32-1P 233749-33-2P
 233749-34-3P 233749-35-4P 233749-36-5P
 233749-37-6P 233749-38-7P 233749-39-8P
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 233749-43-4P 233749-44-5P 233749-45-6P
 233749-46-7P 233749-47-8P 233749-48-9P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (solid-phase synthesis of hydroxamic acid based TNF-.alpha. convertase inhibitors)

RN 204125-69-9 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-(phenylsulfonyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

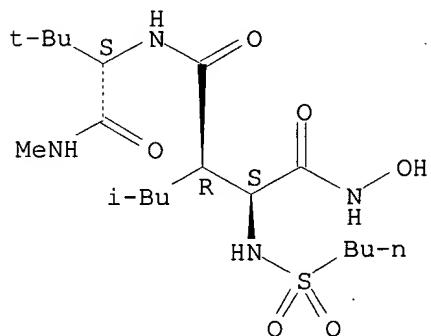
Absolute stereochemistry.



RN 233749-20-7 HCPLUS

CN L-Valinamide, (3R)-N2-(butylsulfonyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

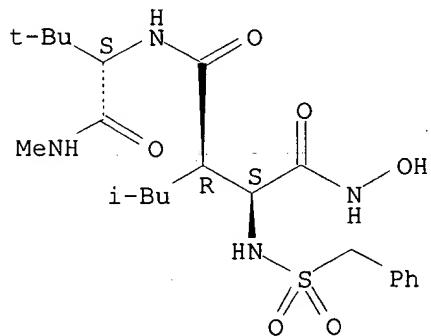
Absolute stereochemistry.



RN 233749-21-8 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(phenylmethyl)sulfonyl]-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



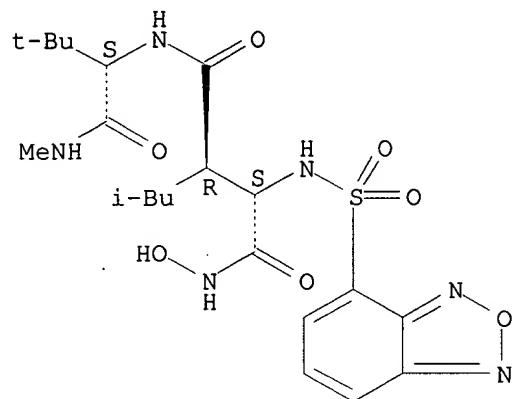
RN 233749-22-9 HCPLUS

Searched by John Dantzman

308-4488

CN L-Valinamide, (3R)-N2-(2,1,3-benzoxadiazol-4-ylsulfonyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

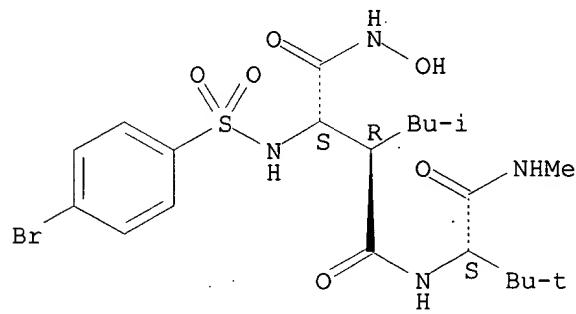
Absolute stereochemistry.



RN 233749-23-0 HCPLUS

CN L-Valinamide, (3R)-N2-[(4-bromophenyl)sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

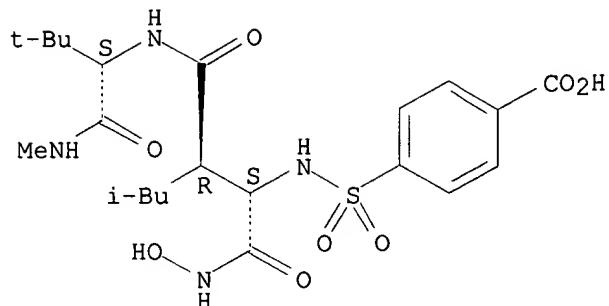
Absolute stereochemistry.



RN 233749-24-1 HCPLUS

CN L-Valinamide, (3R)-N2-[(4-carboxyphenyl)sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

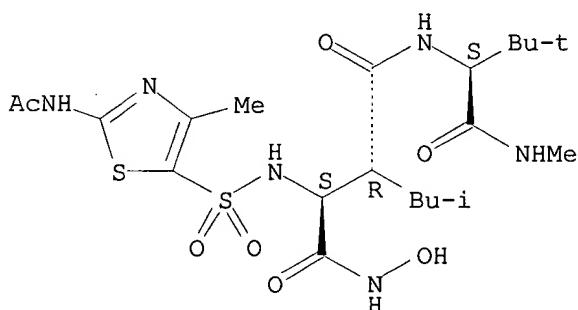
Absolute stereochemistry.



RN 233749-25-2 HCPLUS

CN L-Valinamide, (3R)-N2-[{2-(acetylamino)-4-methyl-5-thiazolyl}sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L.-alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

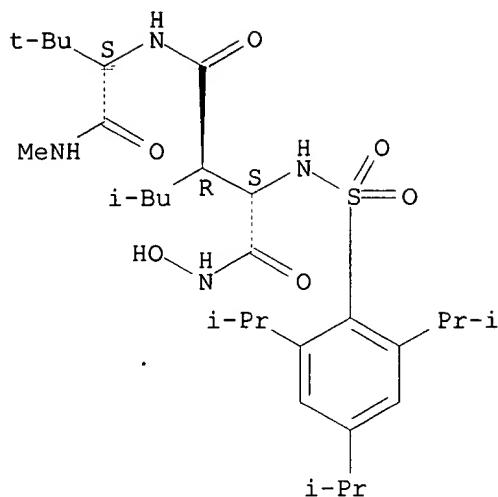
Absolute stereochemistry.



RN 233749-26-3 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[{2,4,6-tris(1-methylethyl)phenyl}sulfonyl]-L.-alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

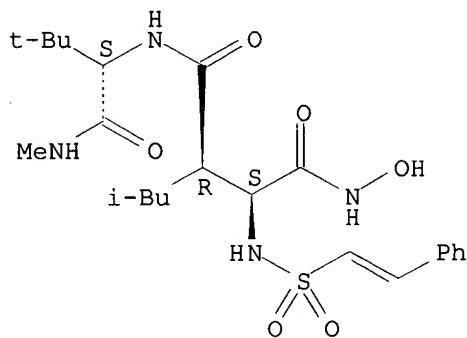


RN 233749-27-4 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(2-phenylethenyl)sulfonyl]-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

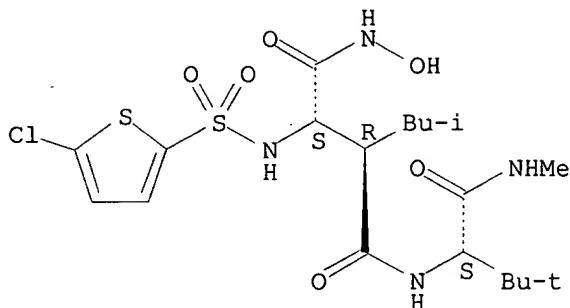
Double bond geometry unknown.



RN 233749-28-5 HCPLUS

CN L-Valinamide, (3R)-N2-[(5-chloro-2-thienyl)sulfonyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

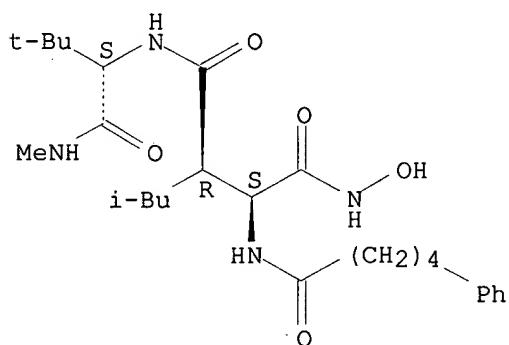
Absolute stereochemistry.



RN 233749-29-6 HCPLUS

CN L-Valinamide,
(3R)-N-hydroxy-3-(2-methylpropyl)-N2-(1-oxo-5-phenylpentyl)-
L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

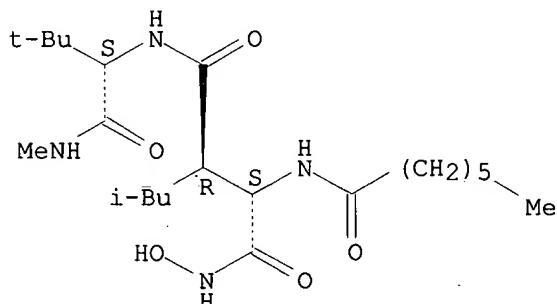
Absolute stereochemistry.



RN 233749-30-9 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-N-(1-oxoheptyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

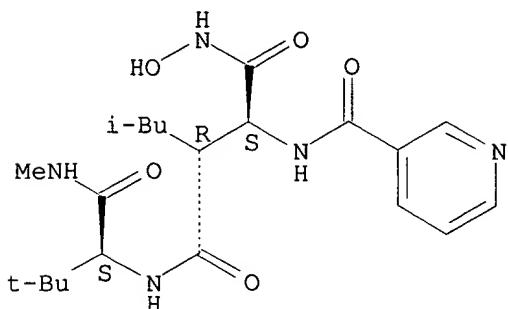


RN 233749-31-0 HCPLUS

CN L-Valinamide,
(3R)-N-hydroxy-3-(2-methylpropyl)-N2-(3-pyridinylcarbonyl)-L-
Searched by John Dantzman 308-4488

.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

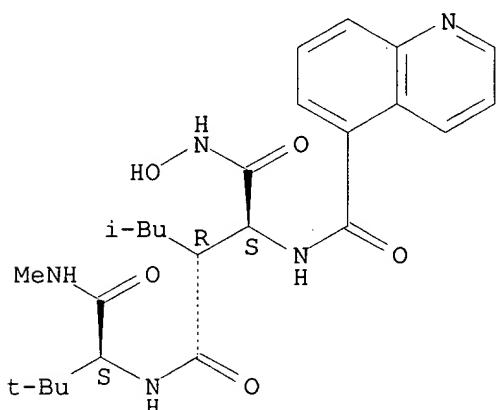
Absolute stereochemistry.



RN 233749-32-1 HCPLUS

CN L-Valinamide,
(3R)-N-hydroxy-3-(2-methylpropyl)-N2-(5-quinolinylcarbonyl)-
L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

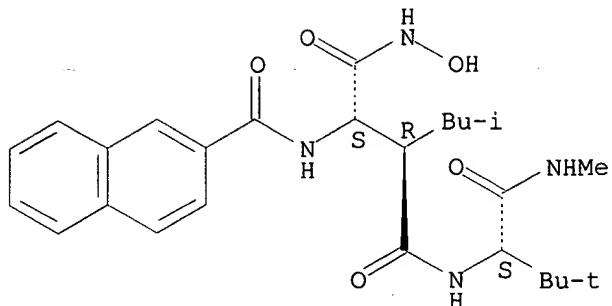
Absolute stereochemistry.



RN 233749-33-2 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-(2-naphthalenylcarbonyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

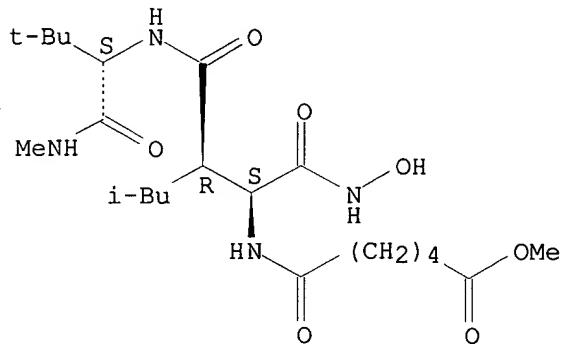
Absolute stereochemistry.



RN 233749-34-3 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-N2-(6-methoxy-1,6-dioxohexyl)-3-(2-methylpropyl)-L.-alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

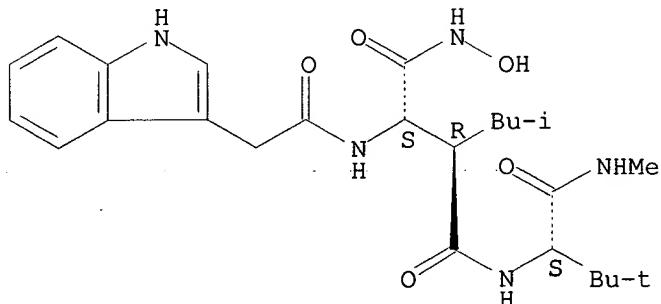
Absolute stereochemistry.



RN 233749-35-4 HCPLUS

CN L-Valinamide,
(3R)-N-hydroxy-N2-(1H-indol-3-ylacetyl)-3-(2-methylpropyl)-L.-alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

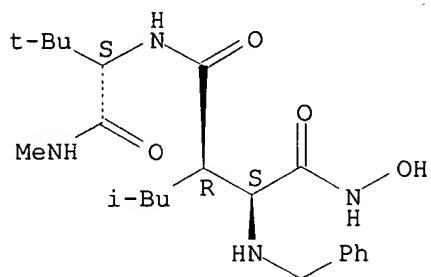


RN 233749-36-5 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-(phenylmethyl)-L.-alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Searched by John Dantzman 308-4488

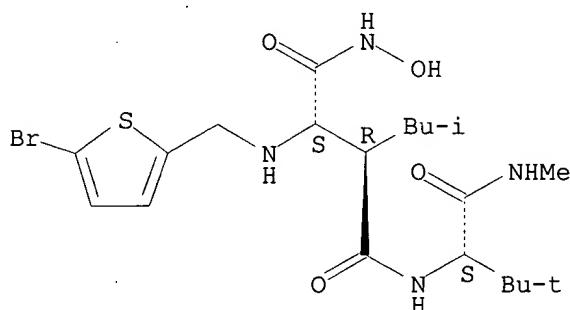
Absolute stereochemistry.



RN 233749-37-6 HCPLUS

CN L-Valinamide, (3R)-N2-[{(5-bromo-2-thienyl)methyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

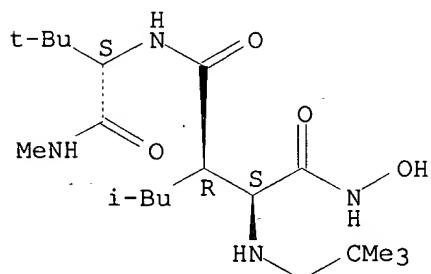
Absolute stereochemistry.



RN 233749-38-7 HCPLUS

CN L-Valinamide,
(3R)-N2-(2,2-dimethylpropyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

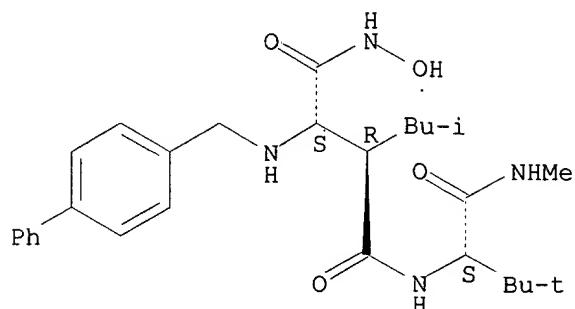
Absolute stereochemistry.



RN 233749-39-8 HCPLUS

CN L-Valinamide, (3R)-N2-([1,1'-biphenyl]-4-ylmethyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

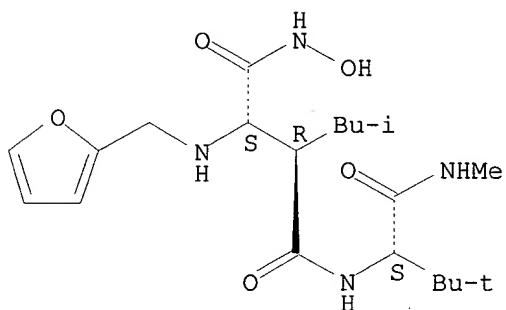
Absolute stereochemistry.



RN 233749-40-1 HCPLUS

CN L-Valinamide, (3R)-N2-(2-furanylmethyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

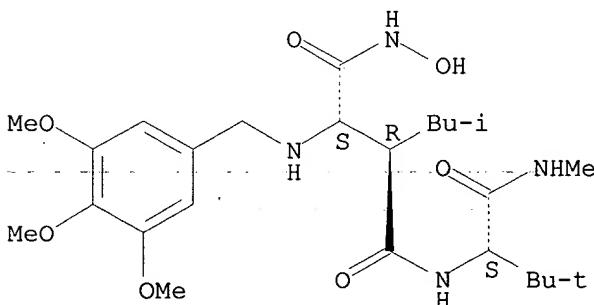
Absolute stereochemistry.



RN 233749-41-2 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(3,4,5-trimethoxyphenyl)methyl]-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



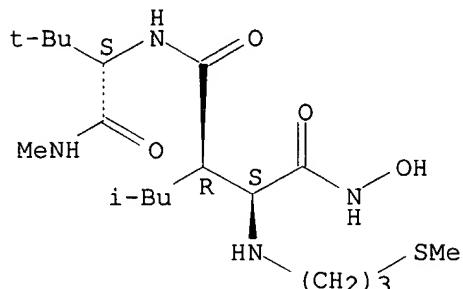
RN 233749-42-3 HCPLUS

CN L-Valinamide,

(3R)-N-hydroxy-3-(2-methylpropyl)-N2-[3-(methylthio)propyl]-
Searched by John Dantzman 308-4488

L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

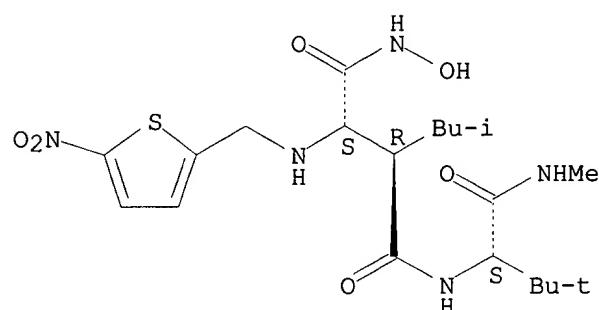
Absolute stereochemistry.



RN 233749-43-4 HCPLUS

CN L-Valinamide, (3R)-N-hydroxy-3-(2-methylpropyl)-N2-[(5-nitro-2-thienyl)methyl]-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

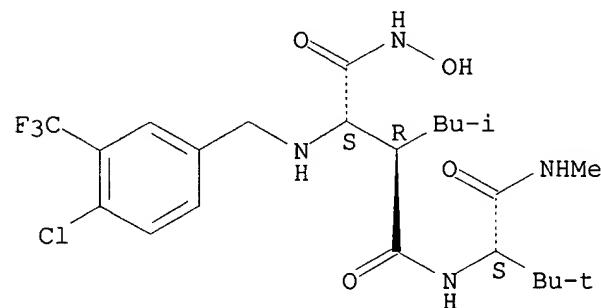
Absolute stereochemistry.



RN 233749-44-5 HCPLUS

CN L-Valinamide, (3R)-N2-[[4-chloro-3-(trifluoromethyl)phenyl]methyl]-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

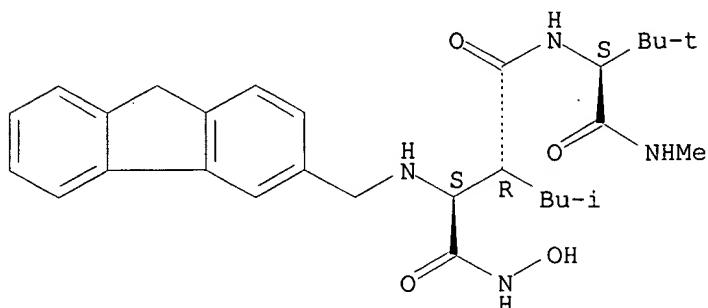


RN 233749-45-6 HCPLUS

CN L-Valinamide,

(3R)-N2-(9H-fluoren-3-ylmethyl)-N-hydroxy-3-(2-methylpropyl)-
L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

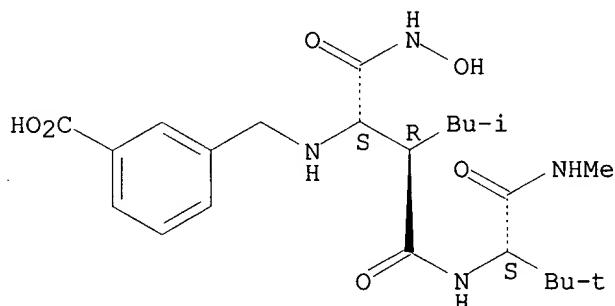
Absolute stereochemistry.



RN 233749-46-7 HCPLUS

CN L-Valinamide, (3R)-N2-[(3-carboxyphenyl)methyl]-N-hydroxy-3-(2-
methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

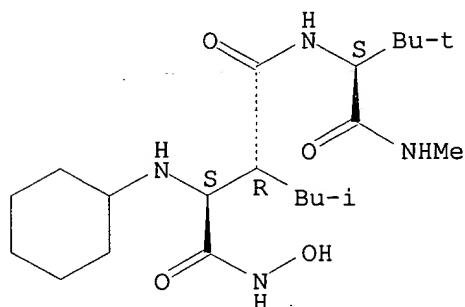
Absolute stereochemistry.



RN 233749-47-8 HCPLUS

CN L-Valinamide, (3R)-N2-cyclohexyl-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-
asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

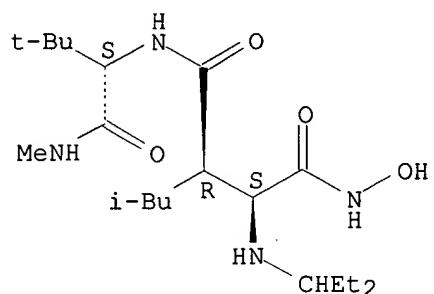
Absolute stereochemistry.



RN 233749-48-9 HCPLUS

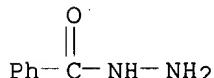
CN L-Valinamide, (3R)-N2-(1-ethylpropyl)-N-hydroxy-3-(2-methylpropyl)-L-.alpha.-asparaginyl-N,3-dimethyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



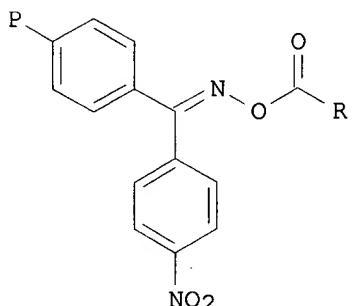
=> d bib abs hitstr 6

L23 ANSWER 6 OF 52 HCPLUS COPYRIGHT 1999 ACS
AN 1999:118572 HCPLUS
DN 130:237513
TI Polymer-supported acylhydrazones. Use in Sc(OTf)3-catalyzed Mannich-type reactions providing an efficient method for the preparation of diverse pyrazolone derivatives
AU Kobayashi, Shu; Furuta, Takayuki; Sugita, Kasumi; Okitsu, Osamu; Oyamada, Hidekazu
CS Graduate School of Pharmaceutical Sciences, CREST, Japan Science and Technology Corporation (JST), The University of Tokyo, Tokyo, 113-0033, Japan
SO Tetrahedron Lett. (1999), 40(7), 1341-1344
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
AB Polymer-supported acylhydrazones, prepd. from polystyrene **resin** (1%-divinylbenzene), reacted with ketene silyl acetals in the presence of a catalytic amt. of scandium triflate to afford the corresponding .beta.-hydrazino esters, which were cyclized and cleaved from the support simultaneously by treatment with a base to produce diverse pyrazolone derivs.
IT 613-94-5DP, Benzoylhydrazine, polymer-bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(**solid-phase synthesis** of pyrazolones via
Sc(OTf)3-catalyzed Mannich-type reaction of polymer-supported benzoylhydrazones)
RN 613-94-5 HCPLUS
CN Benzoic acid, hydrazide (6CI, 8CI, 9CI) (CA INDEX NAME)

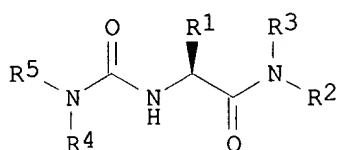


=> d bib abs hitstr 7

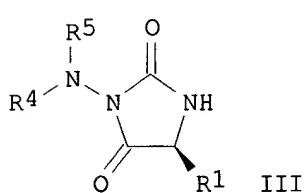
L23 ANSWER 7 OF 52 HCAPLUS COPYRIGHT 1999 ACS
 AN 1999:112342 HCAPLUS
 DN 130:252642
 TI Solid-Phase Synthesis of Acyclic and Cyclic Amino Acid Derived Urea Peptidomimetics Using Phoxime Resin
 AU Hamuro, Yoshitomo; Marshall, William J.; Scialdone, Mark A.
 CS DuPont Life Sciences Enterprise Biochemical Science and Engineering, Wilmington, DE, 19880-0328, USA
 SO J. Comb. Chem. (1999), 1(2), 163-172
 CODEN: JCCHFF; ISSN: 1520-4766
 PB American Chemical Society
 DT Journal
 LA English
 GI



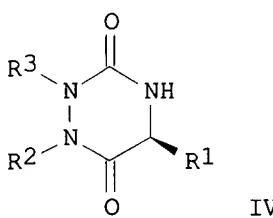
I



II



III



IV

AB The use of phosgenated p-nitrophenyl (polystyrene) ketoxime (Phoxime) resin I ($R = Cl$; $P =$ polystyrene support) in the synthesis of acyclic and heterocyclic amino acid derived ureas is described. Resin I ($R = Cl$) was previously shown to be a useful precursor in the solid-phase prepn. of nonsym. ureas from thermolysis of corresponding primary amine carbamates and subsequent trapping with an amine in soln. Generation of functionalized polymer-supported primary amine oxime carbamates I [$R = Ala-OH$, Val-OH, Phe-OH, Asp(OtBu), Lys(Boc), NHNHCH₂Ph, NHNHCH₂CO₂Et, NHNHPh, NMeNHMe, NHNMe₂, etc.] for further diversification was accomplished by addn. of amino acids or substituted hydrazines. The

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use of these functionalized oxime carbamate **resins** for the generation of acyclic .alpha.-ureidoacetamides II [R1 = Me, CH2Ph, CHMe2, CH2CO2CMe3, (CH2)4NHBoc; R2 = R3 = Et; R2 = H, R3 = CH2Ph, 2-pyridyl; NR2R3 = Phe-OCMe3; R4 = R5 = Et; R4 = H, R5 = PhCH2; R4R5N = morpholino], 3-aminohydantoins III (R1 = Me, CH2Ph; R3 = H, R4 = CH2Ph, 2-pyridyl, 4-MeOC6H4, Ph, 4-O2NC6H4, tosyl, EtO2CCH2; R3 = R4 = Me), and 1,2,4-triazine-3,6-diones IV (R2 = Me, R3 = H, Me; R2 = H, R3 = Me) is suitable for combinatorial library generation.

IT 221635-23-0DP, polystyrene-bound 221635-24-1DP,
polystyrene-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of acyclic and
cyclic amino acid derived urea peptidomimetics using phosgenated
nitrophenyl (polystyrene) ketoxime **resin**)

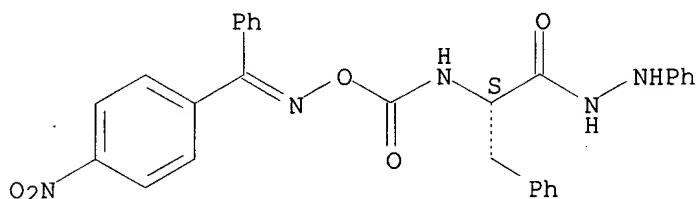
RN 221635-23-0 HCPLUS

CN L-Phenylalanine,

N-[[[(4-nitrophenyl)phenylmethylene]amino]oxy]carbonyl]-
, 2-phenylhydrazide (9CI) (CA INDEX NAME)

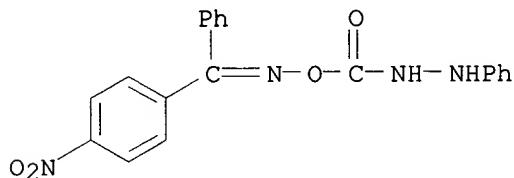
Absolute stereochemistry.

Double bond geometry unknown.



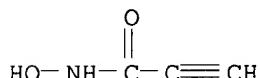
RN 221635-24-1 HCPLUS

CN Methanone, (4-nitrophenyl)phenyl-, O-[(2-phenylhydrazino)carbonyl]oxime
(9CI) (CA INDEX NAME)



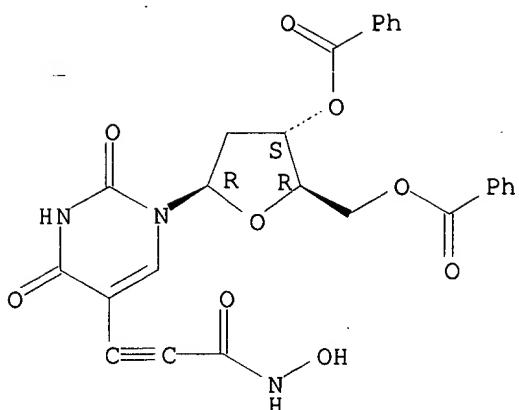
=> d bib abs hitstr 8

L23 ANSWER 8 OF 52 HCPLUS COPYRIGHT 1999 ACS
AN 1998:700116 HCPLUS
DN 130:38625
TI A facile and convenient solid-phase procedure for synthesizing nucleoside hydroxamic acids
AU Khan, Shoeb I.; Grinstaff, Mark W.
CS Department of Chemistry, P.M. Gross Chemical Laboratory, Duke University, Durham, NC, 27708, USA
SO Tetrahedron Lett. (1998), 39(44), 8031-8034
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
AB The solid-phase synthesis of a nucleoside hydroxamic acid is accomplished by the Pd(0) cross-coupling of 5-iodouridine and an O-linked hydroxylamine alkyne bound to 2-chlorotrityl chloride polystyrene resin.
IT 216970-08-0DP, 2-chlorotrityl chloride polystyrene resin bound 216970-11-5DP, 2-chlorotrityl chloride polystyrene resin bound 216970-12-6DP, 2-chlorotrityl chloride polystyrene resin bound
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(facile and convenient solid-phase procedure for synthesizing nucleoside hydroxamic acids)
RN 216970-08-0 HCPLUS
CN 2-Propynamide, N-hydroxy- (9CI) (CA INDEX NAME)



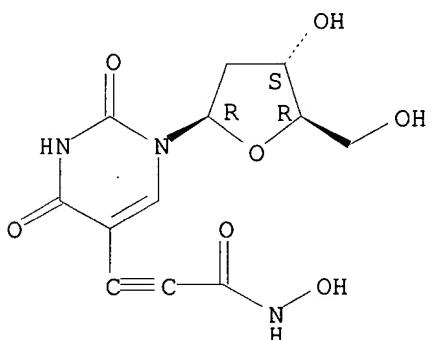
RN 216970-11-5 HCPLUS
CN Uridine, 2'-deoxy-5-[3-(hydroxyamino)-3-oxo-1-propynyl]-, 3',5'-dibenzoate
(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 216970-12-6 HCPLUS
CN Uridine, 2'-deoxy-5-[3-(hydroxyamino)-3-oxo-1-propynyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



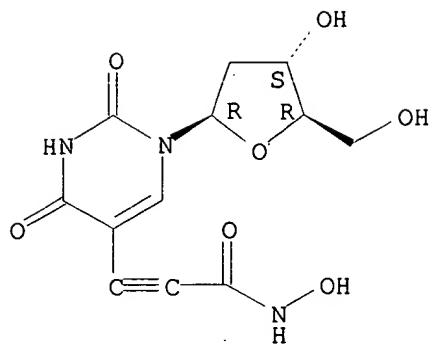
IT 216970-12-6P
RL: SPN (Synthetic preparation); PREP (Preparation)
(facile and convenient **solid-phase** procedure for
synthesizing nucleoside hydroxamic acids)
RN 216970-12-6 HCPLUS
CN Uridine, 2'-deoxy-5-[3-(hydroxyamino)-3-oxo-1-propynyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McCarthy

09/122576

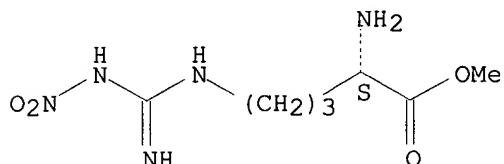
Page 6



=> d bib abs hitstr 9

L23 ANSWER 9 OF 52 HCPLUS COPYRIGHT 1999 ACS
 AN 1998:656995 HCPLUS
 DN 130:25289
 TI Solid and solution phase combinatorial synthesis of ureas
 AU Nieuwenhuijzen, Jose W.; Conti, Paolo G. M.; Ottenheijm, Harry C. J.;
 Linders, Joannes T. M.
 CS Scientific Development Group, NV Organon, Oss, 5340 BH, Neth.
 SO Tetrahedron Lett. (1998), 39(42), 7811-7813
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier Science Ltd.
 DT Journal
 LA English
 OS CASREACT 130:25289
 AB An efficient parallel synthesis of ureas based on amino acids is described, both in soln. and on solid phase. 1,1'-Carbonylbisbenzotriazole is used as the coupling reagent. The ureas MeO2CCHR1NHCONHCHR2CO2Me and HO2CCHR1NHCONHCHR2CO2Me (R1 and R2 are amino acid side chains) were obtained in high yield (80-100%) and purity (71-97%).
 IT 50903-99-6
 RL: RCT (Reactant)
 (solid and soln. phase combinatorial synthesis of ureas based on amino acids)
 RN 50903-99-6 HCPLUS
 CN L-Ornithine, N5-[imino(nitroamino)methyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



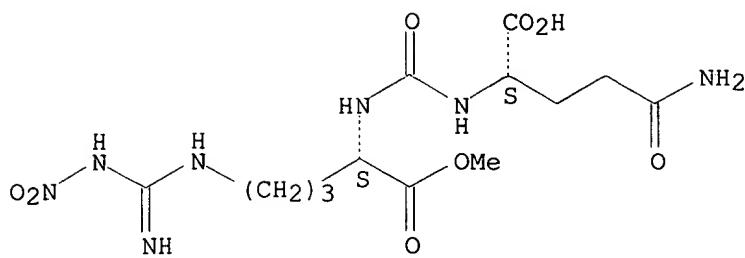
IT 216530-90-4P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (solid and soln. phase combinatorial synthesis of ureas based on amino acids)
 RN 216530-90-4 HCPLUS
 CN L-Glutamine, N2-[[[(1S)-4-[[imino(nitroamino)methyl]amino]-1-(methoxycarbonyl)butyl]amino]carbonyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McCarthy

09/122576

Page 8



=> d bib abs hitstr 10

L23 ANSWER 10 OF 52 HCPLUS COPYRIGHT 1999 ACS
AN 1998:603831 HCPLUS
DN 129:302815
TI Aryl hydrazides as linkers for solid phase synthesis which are cleavable under mild oxidative conditions
AU Millington, Christopher R.; Quarrell, Rachel; Lowe, Gordon
CS Dyson Perrins Lab., Oxford Univ., Oxford, OX1 3QY, UK
SO Tetrahedron Lett. (1998), 39(39), 7201-7204
CODEN: TELEAY; ISSN: 0040-4039
PB Elsevier Science Ltd.
DT Journal
LA English
AB The authors have developed an acid/base stable aryl hydrazide linker which

is readily coupled to solid phase **resins**. Cleavage is specific and facile, requiring a copper (II) catalyst, base and a nucleophile to proceed. The conditions are compatible with all 20 proteinogenic amino acids quant. cleavage is achieved within 2 h at 20.degree. to give peptides with C-terminal acid, amide or ester functionalities. Aryl hydrazides also offer scope as simple "traceless" linkers.

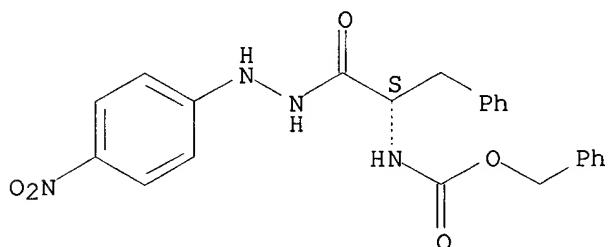
IT 23912-56-3 214475-53-3

RL: RCT (Reactant)
(aryl hydrazides as linkers for **solid phase synthesis** which are cleavable under mild oxidative conditions)

RN 23912-56-3 HCPLUS

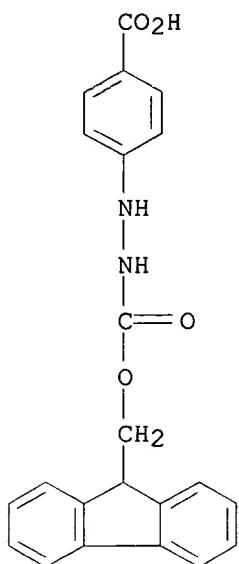
CN L-Phenylalanine, N-[(phenylmethoxy)carbonyl]-, 2-(4-nitrophenyl)hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 214475-53-3 HCPLUS

CN Hydrazinecarboxylic acid, 2-(4-carboxyphenyl)-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)



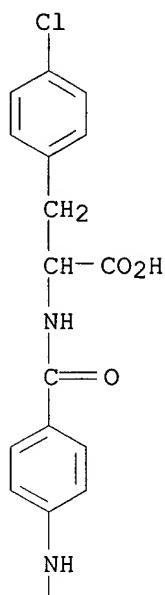
IT 214475-42-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(aryl hydrazides as linkers for **solid phase**
synthesis which are cleavable under mild oxidative conditions)

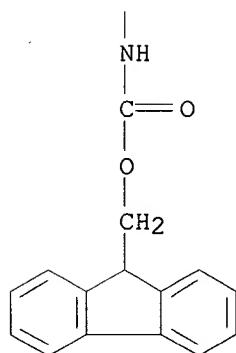
RN 214475-42-0 HCAPLUS

CN Hydrazinecarboxylic acid, 2-[4-[[[1-carboxy-2-(4-chlorophenyl)ethyl]amino]carbonyl]phenyl]-, 1-(9H-fluoren-9-ylmethyl)ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



R3 reaction of XLONR3COR2 (X = solid support; L = null, linking group; R2, = aryl, aliphatyl) with R1M (R1 as above; M = metal) followed by liberation of the ketone from the **resin**. Thus,

N-4-bromobenzyl-N-4-phenylbutanoyl-4-O-(methylhydroxylamine)phenoxyethyl-copoly(styrene-divinylbenzene)**resin** (prepn. given) in Et₂O was treated with EtMgBr in THF followed by 18 h agitation to give 6-phenylhexan-3-one.

IT 1613-88-3P, N-Hydroxy-4-chlorobenzamide 67363-26-2P
200643-18-1P 210227-96-6P 210228-07-2P

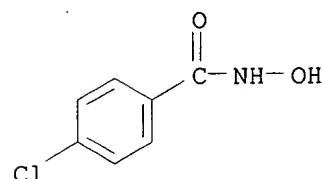
210228-14-1P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(solid phase synthesis of aldehydes, ketones, oximes, amines and hydroxamic acids)

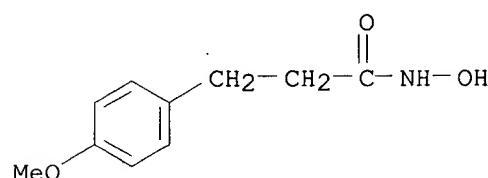
RN 1613-88-3 HCPLUS

CN Benzamide, 4-chloro-N-hydroxy- (9CI) (CA INDEX NAME)



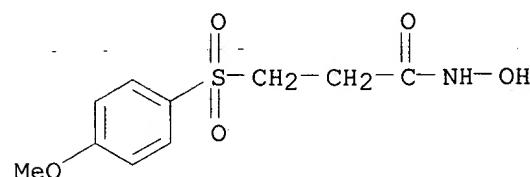
RN 67363-26-2 HCPLUS

CN Benzenepropanamide, N-hydroxy-4-methoxy- (9CI) (CA INDEX NAME)



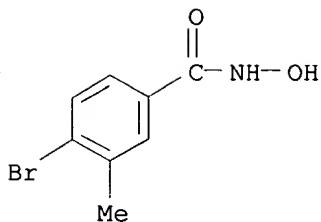
RN 200643-18-1 HCPLUS

CN Propanamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



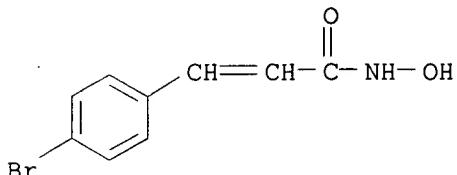
RN 210227-96-6 HCPLUS

CN Benzamide, 4-bromo-N-hydroxy-3-methyl- (9CI) (CA INDEX NAME)



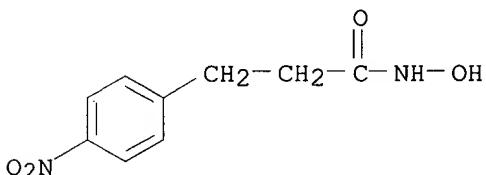
RN 210228-07-2 HCPLUS

CN 2-Propenamide, 3-(4-bromophenyl)-N-hydroxy- (9CI) (CA INDEX NAME)



RN 210228-14-1 HCPLUS

CN Benzene propanamide, N-hydroxy-4-nitro- (9CI) (CA INDEX NAME)



IT 210227-92-2DP, copoly(styrene-divinylbenzene)-bound

210227-93-3DP, copoly(styrene-divinylbenzene)-bound

210227-95-5DP, copoly(styrene-divinylbenzene)-bound

210228-03-8DP, copoly(styrene-divinylbenzene)-bound

210228-05-0DP, copoly(styrene-divinylbenzene)-bound

210228-06-1DP, copoly(styrene-divinylbenzene)-bound

210228-08-3DP, copoly(styrene-divinylbenzene)-bound

210228-10-7DP, copoly(styrene-divinylbenzene)-bound

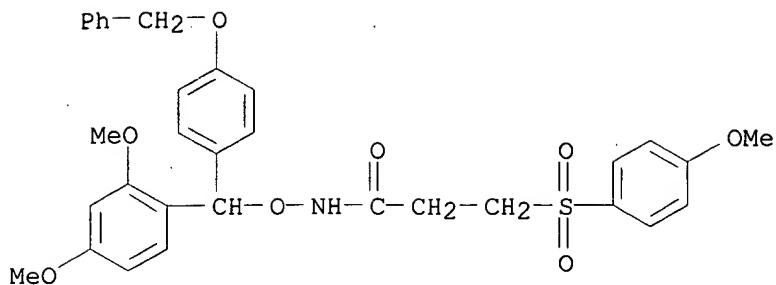
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)

(solid phase synthesis of aldehydes,

ketones, oximes, amines and hydroxamic acids)

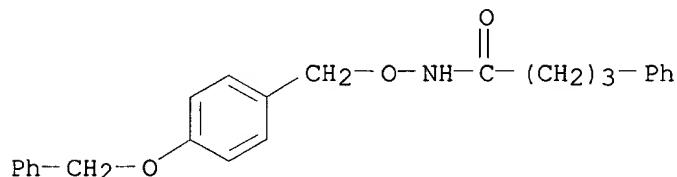
RN 210227-92-2 HCPLUS

CN Propanamide, N-[{(2,4-dimethoxyphenyl)[4-(phenylmethoxy)phenyl]methoxy}-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



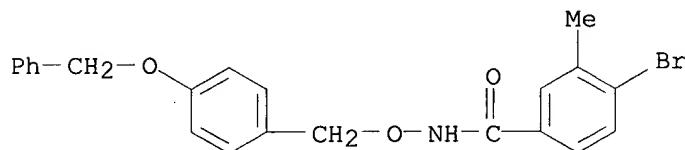
RN 210227-93-3 HCPLUS

CN Benzenebutanamide, N-[4-(phenylmethoxy)phenyl]methoxy- (9CI) (CA INDEX NAME)



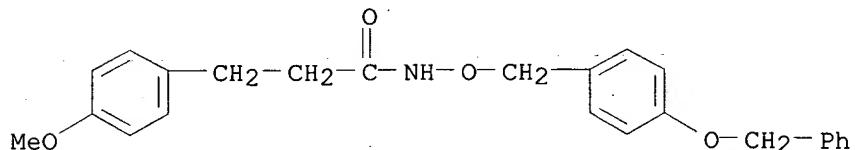
RN 210227-95-5 HCPLUS

CN Benzamide, 4-bromo-3-methyl-N-[4-(phenylmethoxy)phenyl]methoxy- (9CI) (CA INDEX NAME)



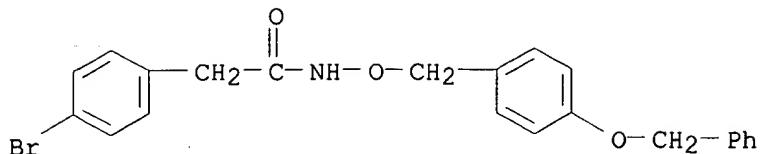
RN 210228-03-8 HCPLUS

CN Benzenepropanamide, 4-methoxy-N-[4-(phenylmethoxy)phenyl]methoxy- (9CI) (CA INDEX NAME)

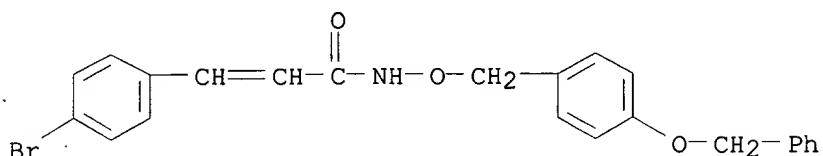


RN 210228-05-0 HCPLUS

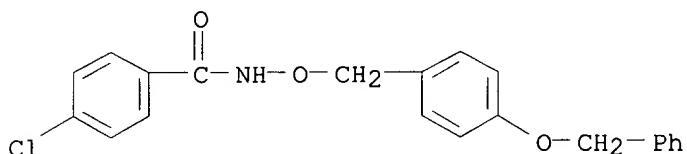
CN Benzeneacetamide, 4-bromo-N-[4-(phenylmethoxy)phenyl]methoxy- (9CI) (CA INDEX NAME)



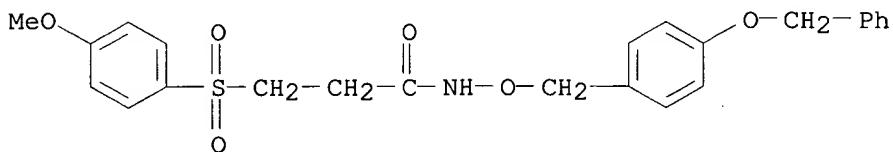
RN 210228-06-1 HCAPLUS
CN 2-Propenamide, 3-[(4-bromophenyl)-N-[(4-(phenylmethoxy)phenyl)methoxy]- (9CI) (CA INDEX NAME)

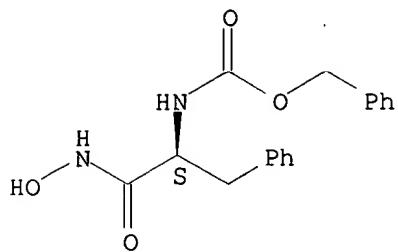


RN 210228-08-3 HCAPLUS
CN Benzamide, 4-chloro-N-[(4-(phenylmethoxy)phenyl)methoxy]- (9CI) (CA INDEX NAME)



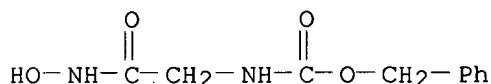
RN 210228-10-7 HCAPLUS
CN Propanamide, 3-[(4-methoxyphenyl)sulfonyl]-N-[(4-(phenylmethoxy)phenyl)methoxy]- (9CI) (CA INDEX NAME)





RN 76960-28-6 HCPLUS

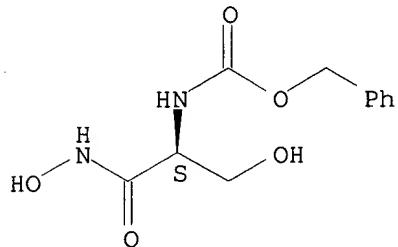
CN Carbamic acid, [2-(hydroxyamino)-2-oxoethyl]-, phenylmethyl ester (9CI)
(CA INDEX NAME)



RN 88144-07-4 HCPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-(hydroxymethyl)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

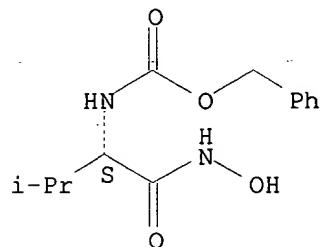
Absolute stereochemistry.



RN 107145-27-7 HCPLUS

CN Carbamic acid, [(1S)-1-[(hydroxyamino)carbonyl]-2-methylpropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



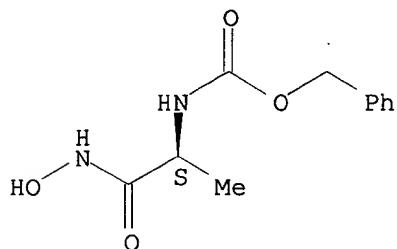
RN 160056-97-3 HCPLUS

Searched by John Dantzman

308-4488

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-methyl-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

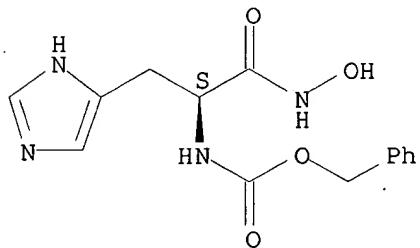
Absolute stereochemistry.



RN 211232-25-6 HCPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-1-(1H-imidazol-4-ylmethyl)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

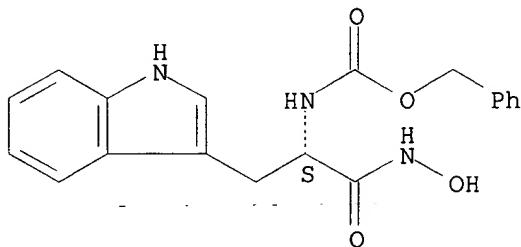
Absolute stereochemistry.



RN 211232-26-7 HCPLUS

CN Carbamic acid,
[(1S)-2-(hydroxyamino)-1-(1H-indol-3-ylmethyl)-2-oxoethyl]-
, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

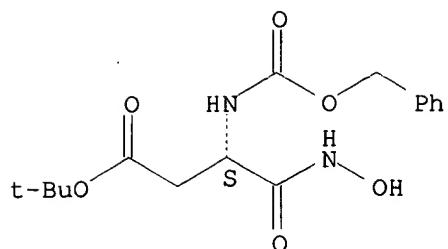


RN 211232-27-8 HCPLUS

CN Butanoic acid,
4-(hydroxyamino)-4-oxo-3-[[(phenylmethoxy)carbonyl]amino]-
1,1-dimethylethyl ester, (3S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

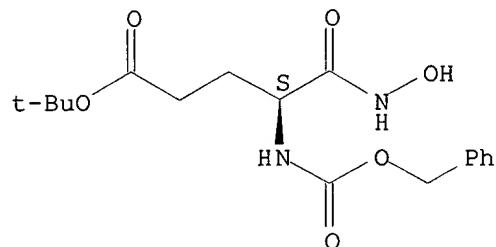
Searched by John Dantzman 308-4488



RN 211232-28-9 HCAPLUS

CN Pentanoic acid,
5-(hydroxyamino)-5-oxo-4-[(phenylmethoxy)carbonyl]amino]-
, 1,1-dimethylethyl ester, (4S)- (9CI) (CA INDEX NAME)

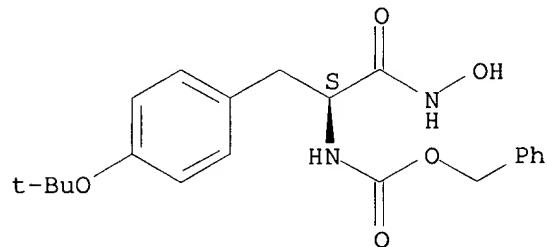
Absolute stereochemistry.



RN 211232-29-0 HCAPLUS

CN Carbamic acid, [(1S)-1-[(4-(1,1-dimethylethoxy)phenyl)methyl]-2-(hydroxyamino)-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

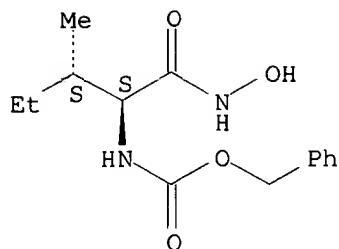
Absolute stereochemistry.



RN 211232-30-3 HCAPLUS

CN Carbamic acid, [(1S,2S)-1-[(hydroxyamino)carbonyl]-2-methylbutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

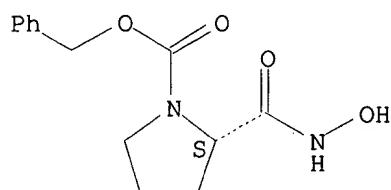
Absolute stereochemistry.



RN 211232-31-4 HCAPLUS

CN 1-Pyrrolidinecarboxylic acid, 2-[(hydroxyamino)carbonyl]-, phenylmethyl ester, (2S)- (9CI) (CA INDEX NAME)

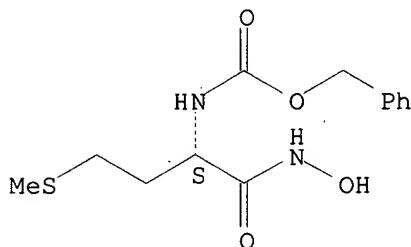
Absolute stereochemistry.



RN 211232-32-5 HCAPLUS

CN Carbamic acid, [(1S)-1-[(hydroxyamino)carbonyl]-3-(methylthio)propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

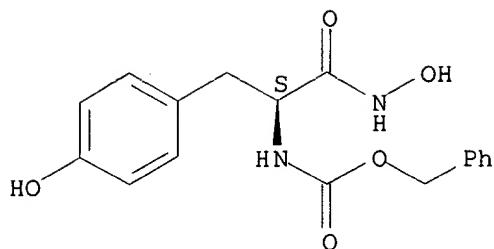
Absolute stereochemistry.



RN 211232-33-6 HCAPLUS

CN Carbamic acid, [(1S)-2-[(hydroxyamino)-1-[(4-hydroxyphenyl)methyl]-2-oxoethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

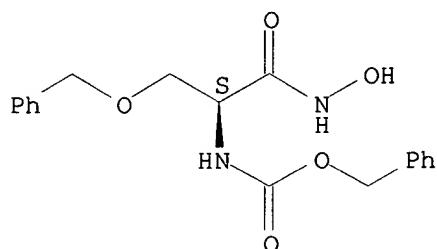
Absolute stereochemistry.



RN 211232-34-7 HCPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-2-oxo-1-[(phenylmethoxy)methyl]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

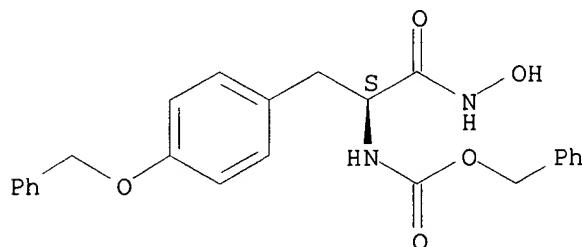
Absolute stereochemistry.



RN 211232-35-8 HCPLUS

CN Carbamic acid, [(1S)-2-(hydroxyamino)-2-oxo-1-[(4-(phenylmethoxy)phenyl)methyl]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

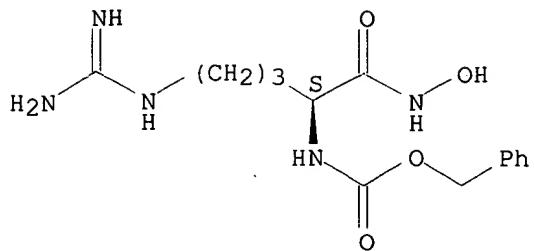
Absolute stereochemistry.



RN 211232-36-9 HCPLUS

CN Carbamic acid, [(1S)-4-[(aminoiminomethyl)amino]-1-[(hydroxyamino)carbonyl]butyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

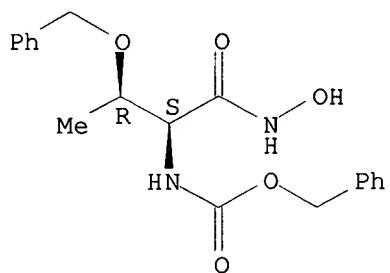
Absolute stereochemistry.



RN 211232-37-0 HCPLUS

CN Carbamic acid, [(1S,2R)-1-[(hydroxyamino)carbonyl]-2-(phenylmethoxy)propyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

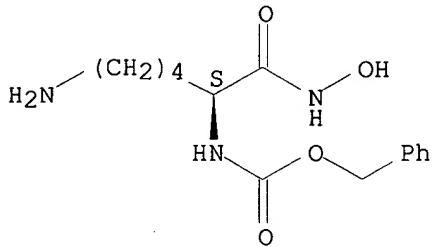
Absolute stereochemistry.



RN 211232-38-1 HCPLUS

CN Carbamic acid, [(1S)-5-amino-1-[(hydroxyamino)carbonyl]pentyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

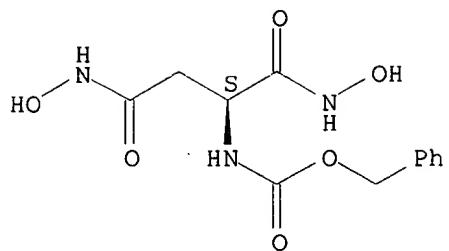
Absolute stereochemistry.



RN 211232-39-2 HCPLUS

CN Carbamic acid, [(1S)-3-[(hydroxyamino)carbonyl]-3-oxopropyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

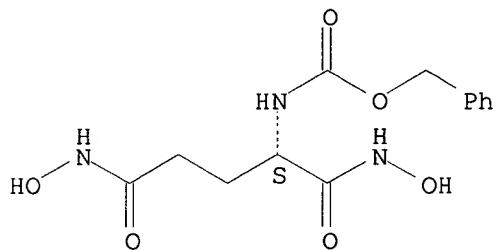
Absolute stereochemistry.

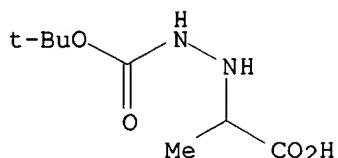


RN 211232-40-5 HCAPLUS

CN Carbamic acid, [(1S)-4-(hydroxyamino)-1-[(hydroxyamino)carbonyl]-4-oxobutyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

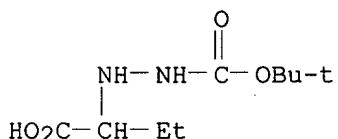
Absolute stereochemistry.





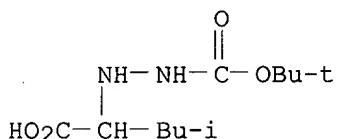
RN 211107-24-3 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxypropyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



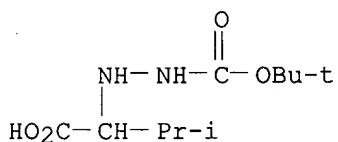
RN 211107-25-4 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxy-3-methylbutyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 211107-29-8 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxy-2-methylpropyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

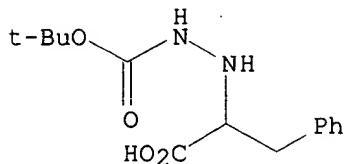


IT 14381-08-9DP, polymer-bound 54600-94-1DP, polymer-bound 70744-14-8DP, polymer-bound 115262-99-2DP, polymer-bound 211107-24-3DP, polymer-bound 211107-25-4DP, polymer-bound 211107-27-6DP, polymer-bound 211107-29-8DP, polymer-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(solid phase synthesis of
1-aminohydantoin libraries)

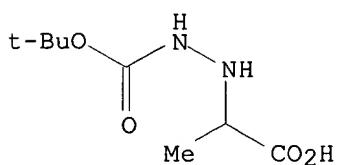
RN 14381-08-9 HCAPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxy-2-phenylethyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



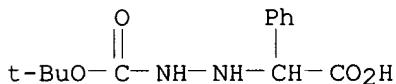
RN 54600-94-1 HCPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxyethyl)-, 1-(1,1-dimethylethyl)ester
(9CI) (CA INDEX NAME)



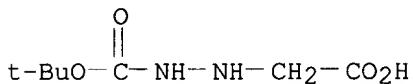
RN 70744-14-8 HCPLUS.

CN Hydrazinecarboxylic acid, 2-(carboxyphenylmethyl)-, 1-(1,1-dimethylethyl)ester
(9CI) (CA INDEX NAME)



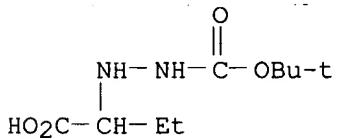
RN 115262-99-2 HCPLUS

CN Hydrazinecarboxylic acid, 2-(carboxymethyl)-, 1-(1,1-dimethylethyl) ester
(9CI) (CA INDEX NAME)



RN 211107-24-3 HCPLUS

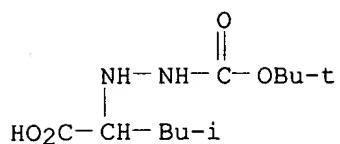
CN Hydrazinecarboxylic acid, 2-(1-carboxypropyl)-, 1-(1,1-dimethylethyl) ester
(9CI) (CA INDEX NAME)



RN 211107-25-4 HCPLUS

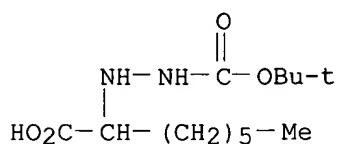
CN Hydrazinecarboxylic acid, 2-(1-carboxy-3-methylbutyl)-, 1-(1,1-dimethylethyl) ester
(9CI) (CA INDEX NAME)

Searched by John Dantzman 308-4488



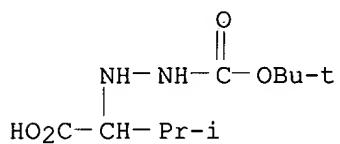
RN 211107-27-6 HCPLUS

CN Hydrazinecarboxylic acid, 2-(1-carboxyheptyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



RN 211107-29-8 HCPLUS

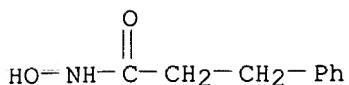
CN Hydrazinecarboxylic acid, 2-(1-carboxy-2-methylpropyl)-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)



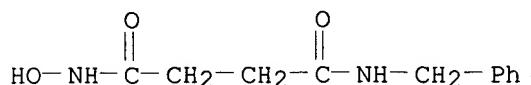
=> d bib abs hitstr 14

L23 ANSWER 14 OF 52 HCAPLUS COPYRIGHT 1999 ACS
AN 1998:293467 HCAPLUS
DN 129:4503
TI Solid-phase synthesis of hydroxylamine compounds, derivatives, and combinatorial libraries thereof
IN Patel, Dinesh; Nhu, Khehyong
PA Versicor, Inc., USA; Patel, Dinesh; Nhu, Khehyong
SO PCT Int. Appl., 98 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|---|------|----------|-----------------|----------|
| PI | WO 9818754 | A1 | 19980507 | WO 1997-US19481 | 19971027 |
| | W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| | AU 9854263 | A1 | 19980522 | AU 1998-54263 | 19971027 |
| PRAI | US 1996-29788 | | 19961028 | | |
| | US 1997-47468 | | 19970523 | | |
| | WO 1997-US19481 | | 19971027 | | |
| OS | CASREACT 129:4503; MARPAT 129:4503 | | | | |
| AB | A library comprising a plurality of hydroxylamine and/or hydroxylamine derivs. wherein the library is prep'd. by prep'g. a solid support-bound alkoxyamine, derivatizing the supported alkoxyamine, cleaving the derivatized alkoxyamine from the support, and removing the alkoxy protecting group, is claimed. Thus, 4-hydroxymethylphenoxy resin was brominated with PPh ₃ .Br ₂ in CH ₂ Cl ₂ to give 99% bromomethylphenoxy resin. This was treated with PhCH ₂ ONH ₂ and K ₂ CO ₃ in EtOAc/H ₂ O to give benzyloxyamine resin, which was treated with PhCH ₂ CH ₂ COCl and 2,6-di-tert-butyl-4-methylpyridine in DMF to give N-acylated material. | | | | |
| | The latter was treated with CF ₃ CO ₂ H to afford PhCH ₂ CH ₂ CONHOCH ₂ Ph, which was hydrogenated in MeOH over Pd/C to afford PhCH ₂ CH ₂ CONHOH. | | | | |
| IT | 17698-11-2P 56439-40-8P 161313-73-1P 193807-79-3P 207462-42-8P | | | | |
| | RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation) | | | | |
| | (solid-phase synthesis of hydroxylamine compds., derivs., and combinatorial libraries thereof) | | | | |
| RN | 17698-11-2 HCAPLUS | | | | |
| CN | Benzene propanamide, N-hydroxy- (9CI) (CA INDEX NAME) | | | | |

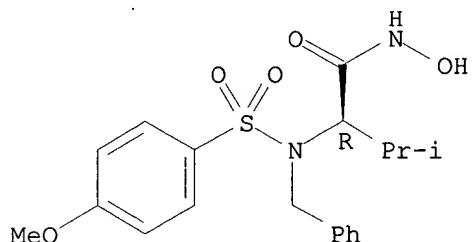


RN 56439-40-8 HCAPLUS
 CN Butanediamide, N-hydroxy-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)



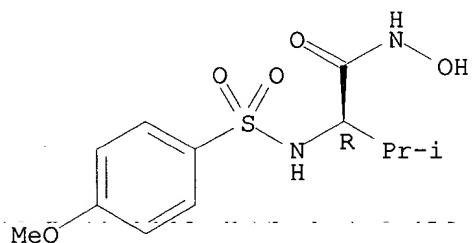
RN 161313-73-1 HCAPLUS
 CN Butanamide,
 N-hydroxy-2-[(4-methoxyphenyl)sulfonyl](phenylmethyl)amino]-3-
 methyl-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



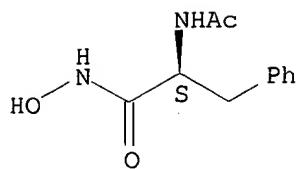
RN 193807-79-3 HCAPLUS
 CN Butanamide, N-hydroxy-2-[(4-methoxyphenyl)sulfonyl]amino]-3-methyl-,
 (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 207462-42-8 HCAPLUS
 CN Benzenepropanamide, .alpha.- (acetylamino)-N-hydroxy-, (.alpha.S)- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.

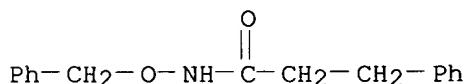


IT 22426-87-5P 153720-65-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(solid-phase synthesis of hydroxylamine
compds., derivs., and combinatorial libraries thereof)

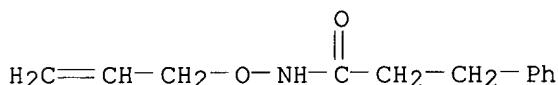
RN 22426-87-5 HCPLUS

CN Benzenepropanamide, N-(phenylmethoxy)- (9CI) (CA INDEX NAME)



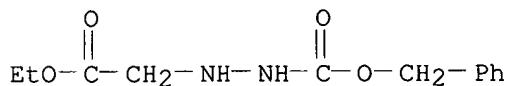
RN 153720-65-1 HCPLUS

CN Benzenepropanamide, N-(2-propenyloxy)- (9CI) (CA INDEX NAME)

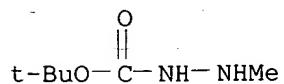


=> d bib abs hitstr 15

L23 ANSWER 15 OF 52 HCAPLUS COPYRIGHT 1999 ACS
 AN 1998:13243 HCAPLUS
 DN 128:102365
 TI Triphosgene: an efficient carbonylating agent for liquid and solid-phase aza-peptide synthesis. Application to the synthesis of two aza-analogs of the AChR MIR decapeptide
 AU Andre, Frederic; Marraud, Michel; Tsouloufis, Theodoros; Tzartos, Socrates
 J.; Boussard, Guy
 CS LCPM, CNRS-URA-494, ENSIC-INPL, Nancy, 54001, Fr.
 SO J. Pept. Sci. (1997), 3(6), 429-441
 CODEN: JPSIEI; ISSN: 1075-2617
 PB John Wiley & Sons Ltd.
 DT Journal
 LA English
 AB The N.alpha./C.alpha.H exchange in aza-peptides has the advantage of preserving the side chain. Bis(trichloromethyl)carbonate or triphosgene is a solid, stable phosgene substitute which retains its high reactivity. Temp. and coupling times are greatly reduced with ref. to other usually recommended carbonylating agents, while purity and yield are increased. It has been used, in both liq.-and solid-phase procedures, for the synthesis of various aza-analogs of dipeptides, tripeptides and decapeptides contg. the alanine, aspartic acid and asparagine aza-residue.
 IT 4503-58-6P 127799-54-6P 201297-68-9P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (triphosgene as efficient carbonylating agent for liq. and solid-phase aza-peptide synthesis)
 RN 4503-58-6 HCAPLUS
 CN Hydrazinecarboxylic acid, 2-(2-ethoxy-2-oxoethyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 127799-54-6 HCAPLUS
 CN Hydrazinecarboxylic acid, 2-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 201297-68-9 HCAPLUS
 CN 1,2-Pyrrolidinedicarboxylic acid, 1-(1,1-dimethylethyl) ester, 2-(2-methylhydrazide), (S)- (9CI) (CA INDEX NAME)

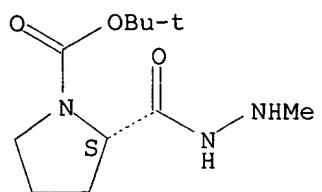
Absolute stereochemistry.

Searched by John Dantzman 308-4488

McCarthy

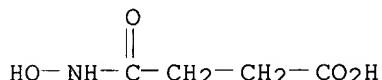
09/122576

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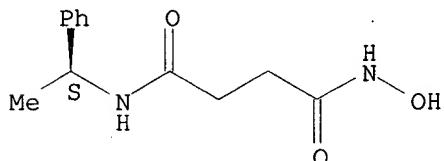
=> d bib abs hitstr 16

L23 ANSWER 16 OF 52 HCAPLUS COPYRIGHT 1999 ACS
 AN 1997:707389 HCAPLUS
 DN 127:358497
 TI A novel linkage for the solid-phase synthesis of hydroxamic acids
 AU Bauer, Udo; Ho, Wen-Bin; Koskinen, Ari M. P.
 CS Department of Chemistry, University of Oulu, Oulu, FI-90571, Finland
 SO Tetrahedron Lett. (1997), 38(41), 7233-7236
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier
 DT Journal
 LA English
 OS CASREACT 127:358497
 AB A novel linkage for the solid-phase synthesis of hydroxamic acids using trityl chloride **resin** as the base matrix is described. Its facile application for the solid-phase synthesis of peptidyl, succinyl, and urea-type hydroxamic acids is illustrated. Cleavage is induced under mild acidic conditions by treatment with formic acid in THF, providing hydroxamic acids in high purity and fair to good yields.
 IT 4743-99-1DP, **resin bound** 198565-50-3DP,
resin bound 198565-51-4DP, **resin bound**
198565-52-5DP, resin bound
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (linkage for **solid-phase synthesis** of
 hydroxamic acids)
 RN 4743-99-1 HCAPLUS
 CN Butanoic acid, 4-(hydroxyamino)-4-oxo- (9CI) (CA INDEX NAME)



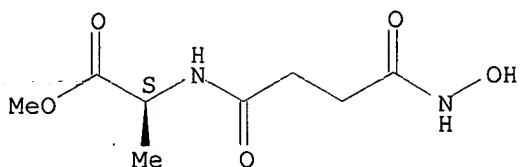
RN 198565-50-3 HCAPLUS
 CN Butanediamide, N-hydroxy-N'-(1-phenylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 198565-51-4 HCAPLUS
 CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI) (CA INDEX NAME)

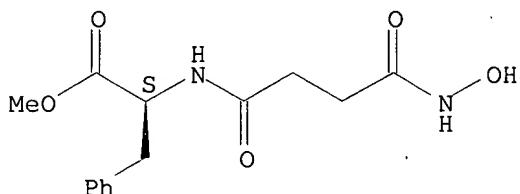
Absolute stereochemistry.



RN 198565-52-5 HCPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



IT 24966-37-8P 198565-50-3P 198565-51-4P

198565-52-5P 198565-53-6P 198565-54-7P

198565-55-8P 198565-56-9P 198565-57-0P

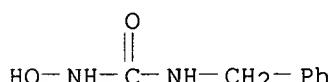
198565-58-1P 198565-59-2P 198565-60-5P

198565-61-6P 198565-62-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(linkage for solid-phase synthesis of
hydroxamic acids)

RN 24966-37-8 HCPLUS

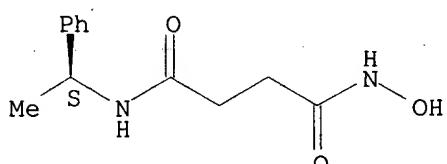
CN Urea, N-hydroxy-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 198565-50-3 HCPLUS

CN Butanediamide, N-hydroxy-N'-(1-phenylethyl)-, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

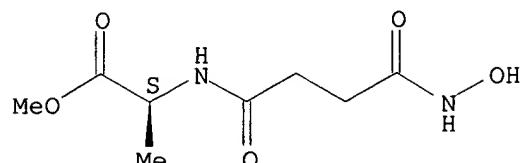


RN 198565-51-4 HCPLUS

CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI) (CA INDEX NAME)

Searched by John Dantzman 308-4488

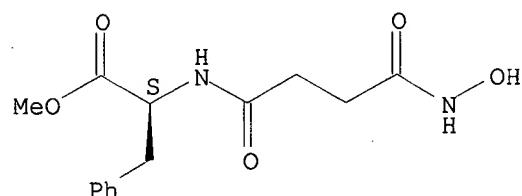
Absolute stereochemistry.



RN 198565-52-5 HCPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-1,4-dioxobutyl]-, methyl ester (9CI)
(CA INDEX NAME)

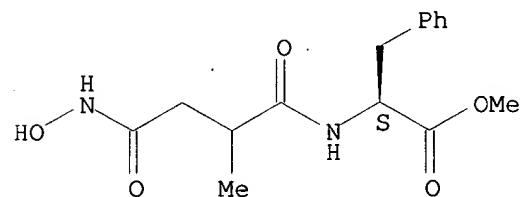
Absolute stereochemistry.



RN 198565-53-6 HCPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-2-methyl-1,4-dioxobutyl]-, methyl ester (9CI) (CA INDEX NAME)

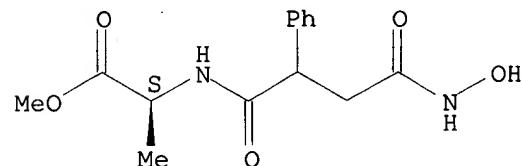
Absolute stereochemistry.



RN 198565-54-7 HCPLUS

CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxo-2-phenylbutyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

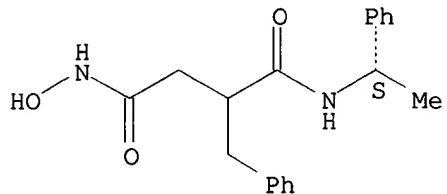


RN 198565-55-8 HCPLUS

CN Butanediamide, N4-hydroxy-N1-(1-phenylethyl)-2-(phenylmethyl)-, [1(S)]-
Searched by John Dantzman 308-4488

(9CI) (CA INDEX NAME)

Absolute stereochemistry.



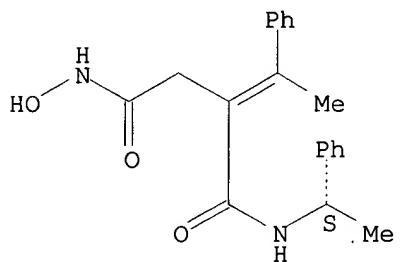
RN 198565-56-9 HCPLUS

CN Butanediamide, N4-hydroxy-N1-(1-phenylethyl)-2-(1-phenylethyldene)-,
(S)-

(9CI) (CA INDEX NAME)

Absolute stereochemistry.

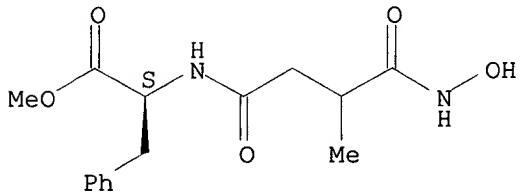
Double bond geometry unknown.



RN 198565-57-0 HCPLUS

CN L-Phenylalanine, N-[4-(hydroxyamino)-3-methyl-1,4-dioxobutyl]-, methyl ester
(9CI) (CA INDEX NAME)

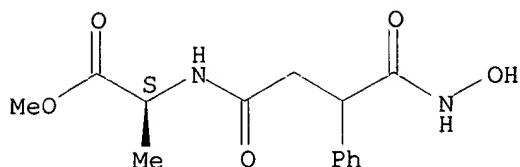
Absolute stereochemistry.



RN 198565-58-1 HCPLUS

CN L-Alanine, N-[4-(hydroxyamino)-1,4-dioxo-3-phenylbutyl]-, methyl ester
(9CI) (CA INDEX NAME)

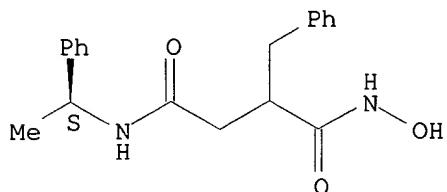
Absolute stereochemistry.



RN 198565-59-2 HCPLUS

CN Butanediamide, N1-hydroxy-N4-(1-phenylethyl)-2-(phenylmethyl)-, [4(S)]- (9CI) (CA INDEX NAME)

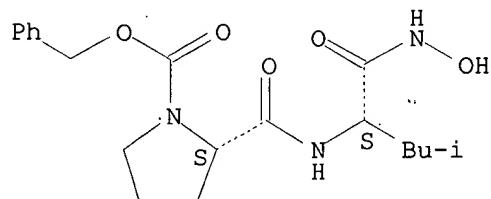
Absolute stereochemistry.



RN 198565-60-5 HCPLUS

CN L-Leucinamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

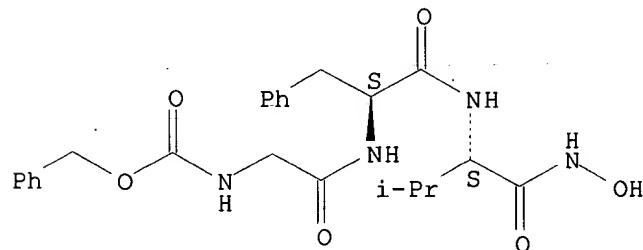
Absolute stereochemistry.



RN 198565-61-6 HCPLUS

CN L-Valinamide, N-[(phenylmethoxy)carbonyl]glycyl-L-phenylalanyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

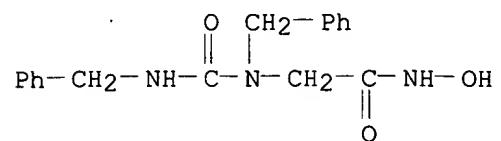


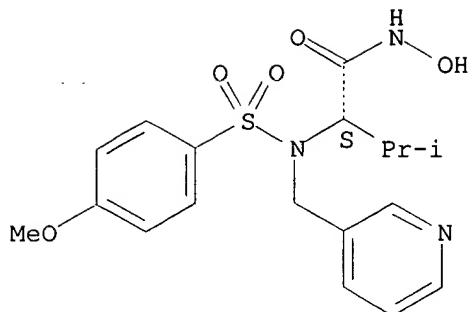
RN 198565-62-7 HCPLUS

Searched by John Dantzman

308-4488

CN Acetamide,
N-hydroxy-2-[(phenylmethyl) [[(phenylmethyl) amino] carbonyl] amino
]- (9CI) (CA INDEX NAME)

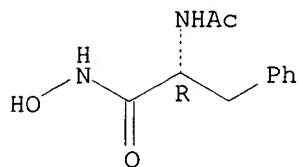




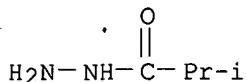
RN 197304-28-2 HCPLUS

CN Benzenepropanamide, .alpha.- (acetylamino)-N-hydroxy-, (R)- (9CI) (CA INDEX NAME)

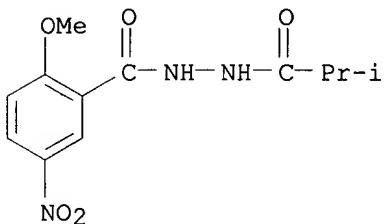
Absolute stereochemistry.



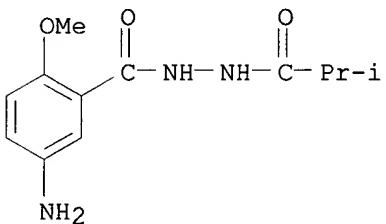
.beta.-sheet structures)
RN 3619-17-8 HCPLUS
CN Propanoic acid, 2-methyl-, hydrazide (9CI) (CA INDEX NAME)



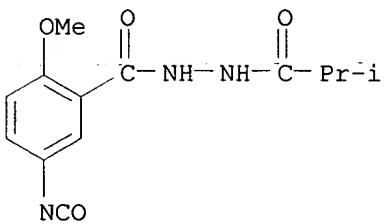
RN 194025-94-0 HCPLUS
CN Benzoic acid, 2-methoxy-5-nitro-, 2-(2-methyl-1-oxopropyl)hydrazide (9CI) (CA INDEX NAME)



RN 194025-95-1 HCPLUS
CN Benzoic acid, 5-amino-2-methoxy-, 2-(2-methyl-1-oxopropyl)hydrazide (9CI) (CA INDEX NAME)



RN 194025-96-2 HCPLUS
CN Benzoic acid, 5-isocyanato-2-methoxy-, 2-(2-methyl-1-oxopropyl)hydrazide (9CI) (CA INDEX NAME)



IT 190248-41-0P 194025-83-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
Searched by John Dantzman 308-4488

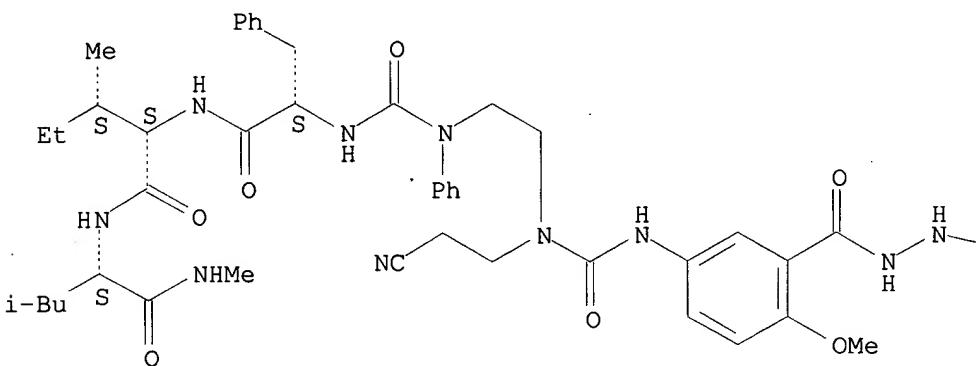
(solid-phase synthesis of artificial
.beta.-sheet structures)

RN 190248-41-0 HCPLUS

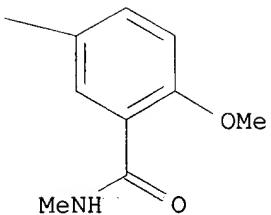
CN L-Leucinamide, N-[[[2-[(2-cyanoethyl)[[[4-methoxy-3-[{2-[4-methoxy-3-
[(methylamino)carbonyl]phenyl]hydrazino]carbonyl]phenyl]amino]carbonyl]ami-
no]ethyl]phenylamino]carbonyl]-L-phenylalanyl-L-isoleucyl-N-methyl- (9CI)
(CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

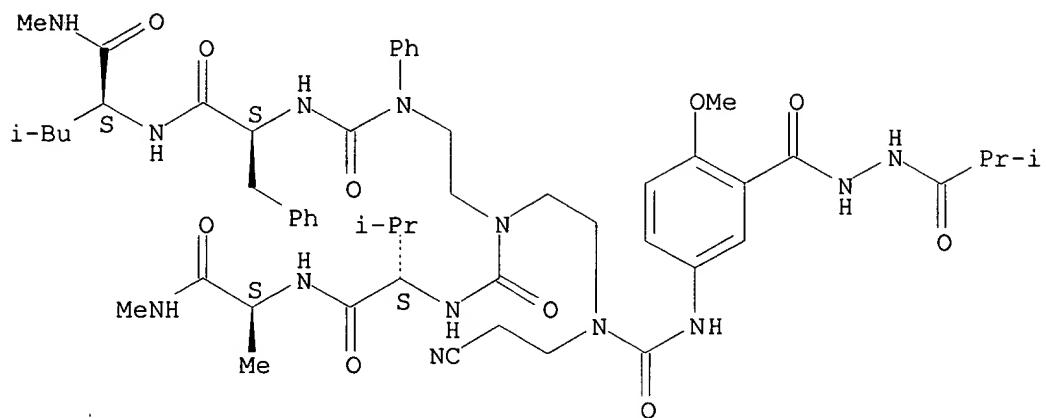


RN 194025-83-7 HCPLUS

CN L-Leucinamide, N-[[[2-[carboxy[2-[(2-cyanoethyl)[[[4-methoxy-3-[{2-(2-
methyl-1-oxopropyl)hydrazino]carbonyl]phenyl]amino]carbonyl]amino]ethyl]am-
ino]ethyl]phenylamino]carbonyl]-L-phenylalanyl-N-methyl-,
(1.fwdarw.1')-amide with L-valyl-N-methyl-L-alaninamide (9CI) (CA INDEX
NAME)

Searched by John Dantzman 308-4488

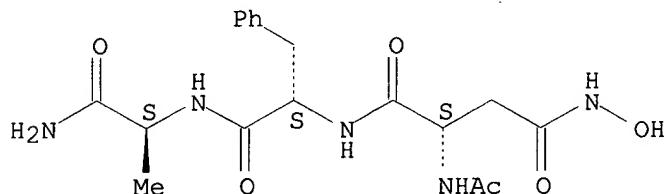
Absolute stereochemistry.



=> d bib abs hitstr 19

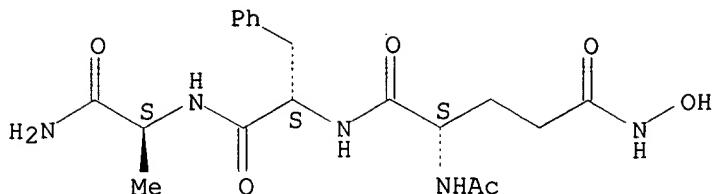
L23 ANSWER 19 OF 52 HCPLUS COPYRIGHT 1999 ACS
 AN 1997:168915 HCPLUS
 DN 126:251406
 TI Solid phase synthesis of peptide hydroxamic acids
 AU Chen, Jack J.; Spatola, Arno F.
 CS Dep. Chem., Univ. Louisville, Louisville, KY, 40292, USA
 SO Tetrahedron Lett. (1997), 38(9), 1511-1514
 CODEN: TELEAY; ISSN: 0040-4039
 PB Elsevier
 DT Journal
 LA English
 AB The synthesis of peptide hydroxamic acids has been performed on a solid support. A carboxyl group of a peptide synthesized on para-methylbenzhydrylamine (pMBHA) **resin** was converted to a hydroxamate functional group by condensing with NH₂OBzl, which was found preferable to NH₂OtBu or NH₂OTrt. The hydroxamate benzyl protecting group was removed subsequently during HF cleavage of the peptide **resin**. Five peptide hydroxamic acids were prepd. according to this new method.
 IT 188730-77-0P 188730-79-2P 188730-81-6P
 188730-83-8P 188730-84-9P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (**solid phase synthesis** of peptide hydroxamic acids)
 RN 188730-77-0 HCPLUS
 CN L-Alaninamide, N²-acetyl-N-hydroxy-L-asparaginyl-L-phenylalanyl- (9CI)
 (CA INDEX NAME)

Absolute stereochemistry.



RN 188730-79-2 HCPLUS
 CN L-Alaninamide, N²-acetyl-N-hydroxy-L-glutaminyl-L-phenylalanyl- (9CI)
 (CA INDEX NAME)

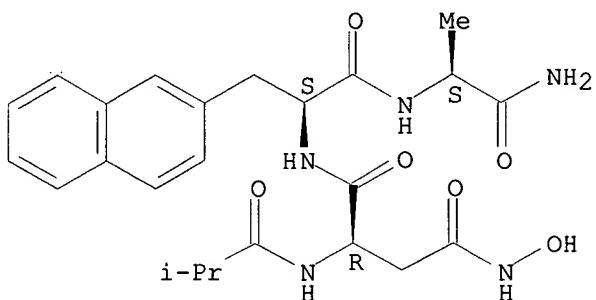
Absolute stereochemistry.



RN 188730-81-6 HCPLUS

CN L-Alaninamide, N-hydroxy-N2-(2-methyl-1-oxopropyl)-D-asparaginyl-3-(2-naphthalenyl)-L-alanyl- (9CI) (CA INDEX NAME)

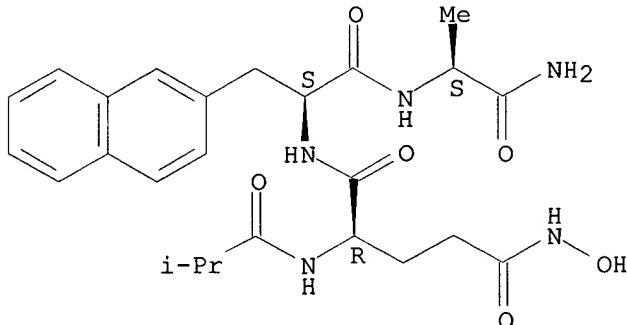
Absolute stereochemistry.



RN 188730-83-8 HCPLUS

CN L-Alaninamide, N-hydroxy-N2-(2-methyl-1-oxopropyl)-D-glutaminyl-3-(2-naphthalenyl)-L-alanyl- (9CI) (CA INDEX NAME)

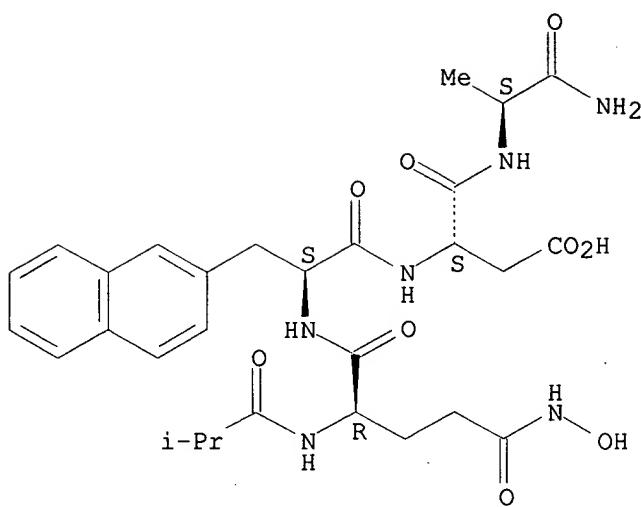
Absolute stereochemistry.



RN 188730-84-9 HCPLUS

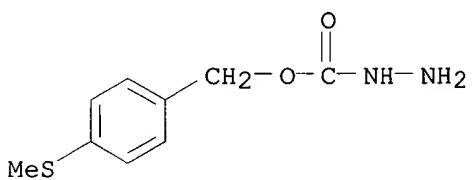
CN L-Alaninamide, N-hydroxy-N2-(2-methyl-1-oxopropyl)-D-glutaminyl-3-(2-naphthalenyl)-L-alanyl-L-.alpha.-aspartyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

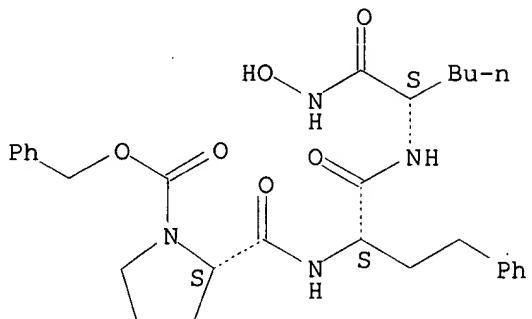


=> d bib abs hitstr 20

L23 ANSWER 20 OF 52 HCAPLUS COPYRIGHT 1999 ACS
AN 1997:80909 HCAPLUS
DN 126:186355
TI A reductive acidolysis final deprotection strategy in solid phase peptide synthesis based on safety-catch protection
AU Kimura, Tooru; Fukui, Toshio; Tanaka, Shigeki; Akaji, Kenichi; Kiso, Yoshiaki
CS Dep. Med. Chem., Kyoto Pharmaceutical Univ., Kyoto, 607, Japan
SO Chem. Pharm. Bull. (1997), 45(1), 18-26
CODEN: CPBTAL; ISSN: 0009-2363
PB Pharmaceutical Society of Japan
DT Journal
LA English
OS CASREACT 126:186355
AB A reductive acidolysis final deprotection strategy in solid phase peptide synthesis was developed using a new safety-catch type of semi-permanent protecting groups and new linkers which were derived from 4-methylsulfinylbenzyl protection. This new strategy was based on a two-dimensional protection scheme employing acid-labile temporary and acid-stable but reductive acidolysis-cleavable semi-permanent protecting groups. Four model peptides were prep'd. using this strategy, two of which contained C-terminal amides.
IT 187280-02-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(reductive acidolysis final deprotection strategy in **solid phase** peptide **synthesis** based on methylsulfinylbenzyl safety-catch protection)
RN 187280-02-0 HCAPLUS
CN Hydrazinecarboxylic acid, [4-(methylthio)phenyl]methyl ester (9CI) (CA INDEX NAME)



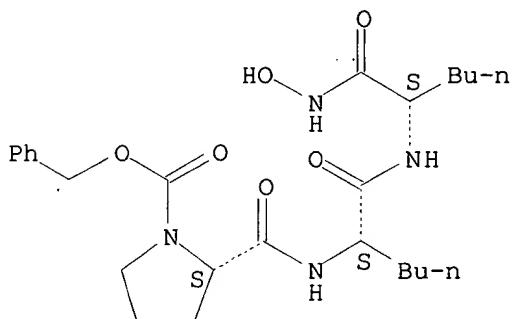
Absolute stereochemistry.



RN 184775-23-3 HCAPLUS

CN L-Norleucinamide, 1-[(phenylmethoxy) carbonyl] -L-prolyl-L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

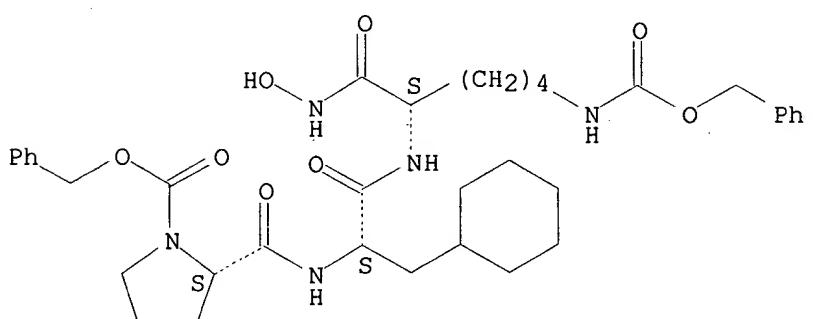
Absolute stereochemistry.



RN 184775-24-4 HCAPLUS

CN L-Lysinamide,
1-[(phenylmethoxy) carbonyl] -L-prolyl-3-cyclohexyl-L-alanyl-N-hydroxy-N6-[(phenylmethoxy) carbonyl] - (9CI) (CA INDEX NAME)

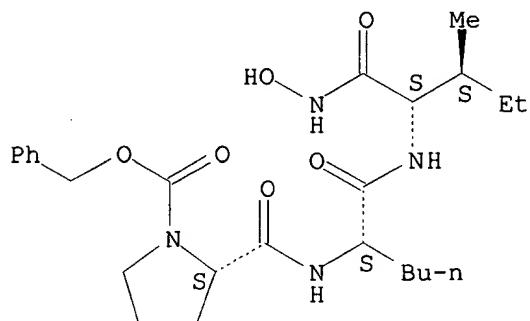
Absolute stereochemistry.



RN 184775-25-5 HCPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy) carbonyl] -L-prolyl-L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

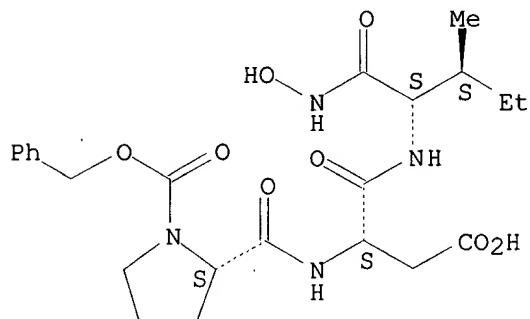
Absolute stereochemistry.



RN 184775-26-6 HCPLUS

CN L-Isoleucinamide,
1-[(phenylmethoxy) carbonyl] -L-prolyl-L-.alpha.-aspartyl-
N-hydroxy- (9CI) (CA INDEX NAME)

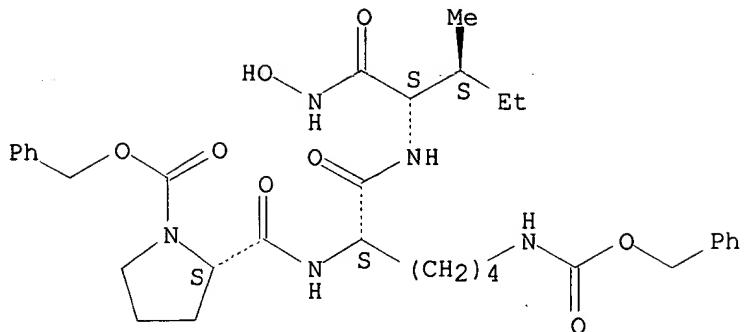
Absolute stereochemistry.



RN 184775-27-7 HCPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy) carbonyl] -L-prolyl-N6-[(phenylmethoxy) carbonyl] -L-lysyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

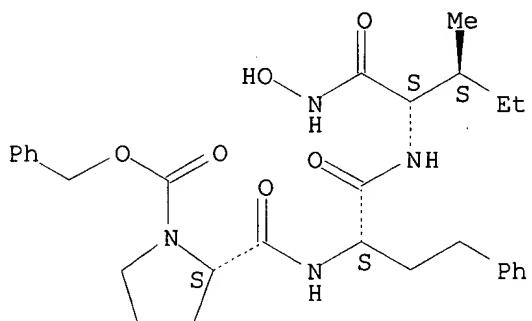


RN 184775-28-8 HCPLUS

CN L-Isoleucinamide,

1-[(phenylmethoxy)carbonyl]-L-proyl-(.alpha.S)-.alpha.-aminobenzenebutanoyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

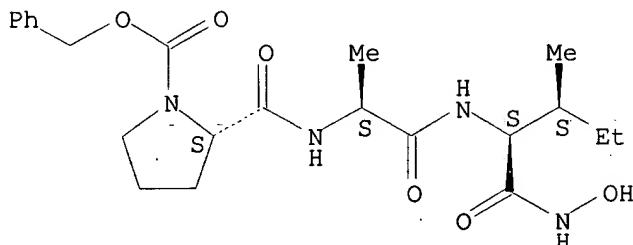


RN 184775-29-9 HCPLUS

CN L-Isoleucinamide,

1-[(phenylmethoxy)carbonyl]-L-proyl-L-alanyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

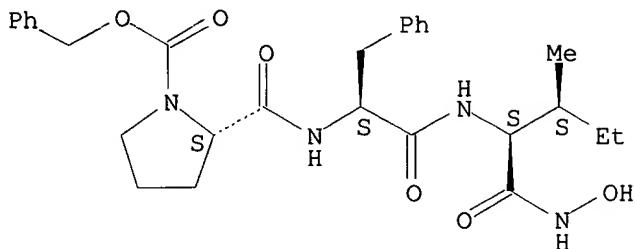


RN 184775-30-2 HCPLUS

CN L-Isoleucinamide, 1-[(phenylmethoxy)carbonyl]-L-proyl-L-phenylalanyl-N-hydroxy- (9CI) (CA INDEX NAME)

Searched by John Dantzman 308-4488

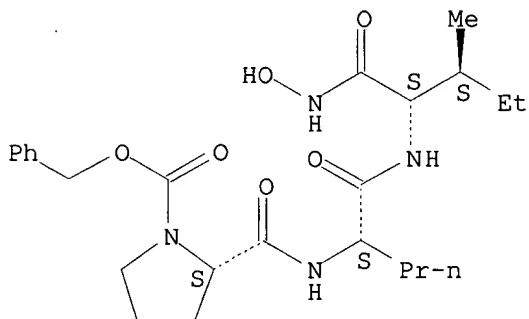
Absolute stereochemistry.



RN 184775-31-3 HCPLUS

CN L-Isoleucinamide, 1-[phenylmethoxy carbonyl]-L-prolyl-L-norvalyl-N-hydroxy- (9CI) (CA INDEX NAME)

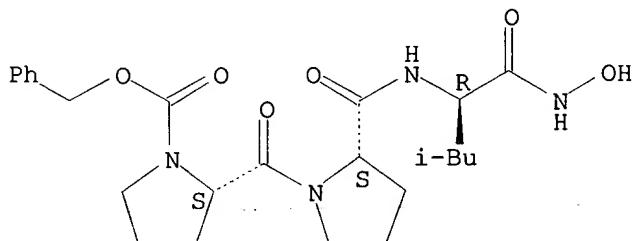
Absolute stereochemistry.



RN 184775-32-4 HCPLUS

CN D-Leucinamide, 1-[phenylmethoxy carbonyl]-L-prolyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

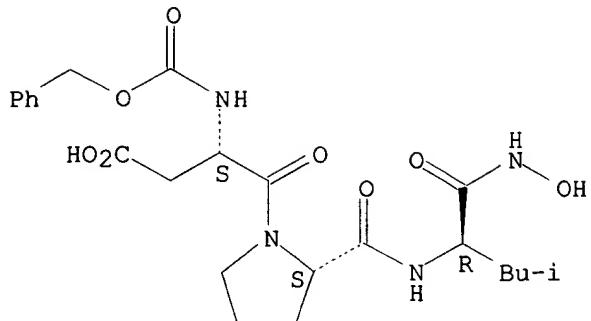
Absolute stereochemistry.



RN 184775-33-5 HCPLUS

CN D-Leucinamide, N-[phenylmethoxy carbonyl]-L-.alpha.-aspartyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

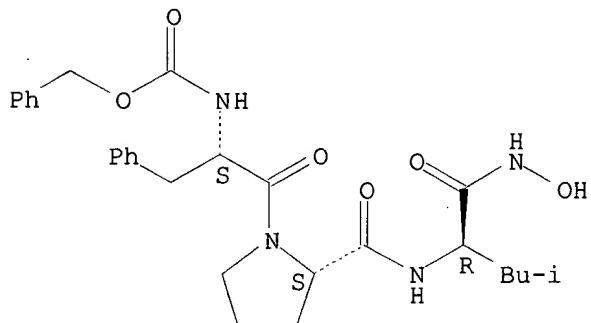
Absolute stereochemistry.



RN 184775-34-6 HCPLUS

CN D-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

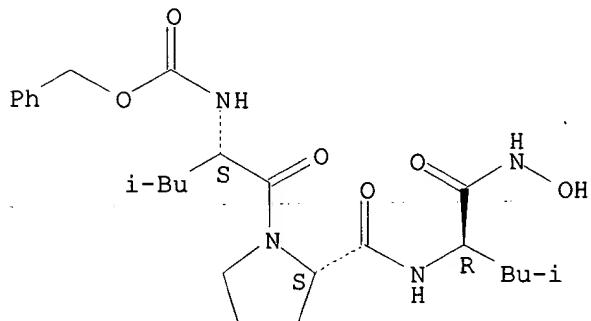
Absolute stereochemistry.



RN 184775-35-7 HCPLUS

CN D-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-leucyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

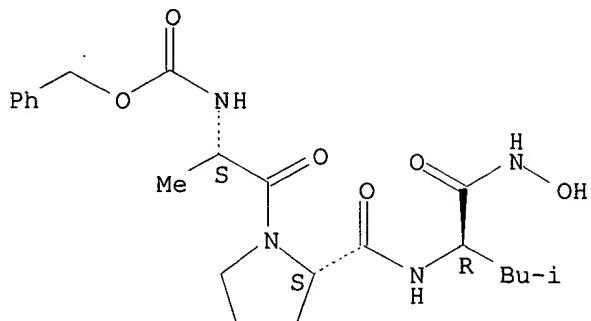


RN 184775-36-8 HCPLUS

CN D-Leucinamide, N-[(phenylmethoxy)carbonyl]-L-alanyl-L-prolyl-N-hydroxy- (9CI) (CA INDEX NAME)

Searched by John Dantzman 308-4488

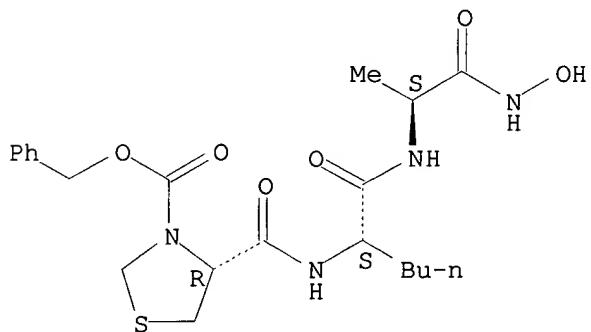
Absolute stereochemistry.



RN 184775-37-9 HCAPLUS

CN L-Alaninamide, (4R)-3-[(phenylmethoxy)carbonyl]-4-thiazolidinecarbonyl-L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

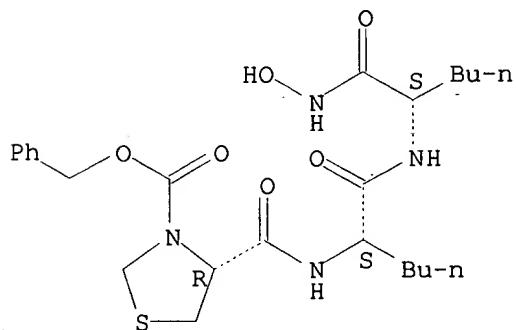
Absolute stereochemistry.



RN 184775-38-0 HCAPLUS

CN L-Norleucinamide,
(4R)-3-[(phenylmethoxy)carbonyl]-4-thiazolidinecarbonyl-
L-norleucyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



McCarthy

09/122576

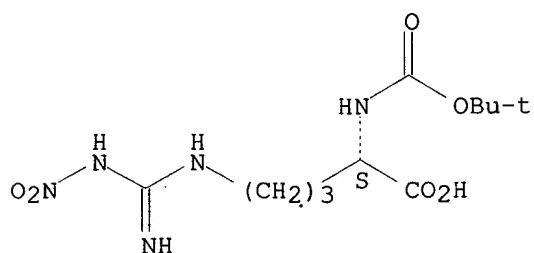
Page 8

Searched by John Dantzman 308-4488

=> d bib abs hitstr 22

L23 ANSWER 22 OF 52 HCPLUS COPYRIGHT 1999 ACS
AN 1996:644093 HCPLUS
DN 125:329314
TI Photoacoustic FTIR Spectroscopy, a Nondestructive Method for Sensitive Analysis of Solid-Phase Organic Chemistry
AU Gosselin, Francis; Di Renzo, Mauro; Ellis, Thomas H.; Lubell, William D.
CS Departement de chimie, Universite de Montreal, Montreal, PQ, H3C 3J7,
Can.
SO J. Org. Chem. (1996), 61(23), 7980-7981
CODEN: JOCEAH; ISSN: 0022-3263
DT Journal
LA English
AB Photoacoustic Fourier-transform IR spectroscopy (PA-FTIR) is superior to conventional FTIR spectroscopy for monitoring chem. reactions in the solid phase. By detecting only the absorption component of the IR beam, PA-FTIR spectroscopy eludes the effects of light scattering and reflection that complicate conventional FTIR methods. Because no sample prep. is required, PA-FTIR spectroscopy was used to examine a sequence of reactions on the same resin sample without product loss. In particular, useful PA-FTIR spectra were recorded before and after each of the four steps to convert resino-(2S)-S-benzyl-N-(BOC)cysteinate into resino-N-(p-cyanobenzoyl)dehydroalanine using the same 10 mg sample of resin. Photoacoustic FTIR spectroscopy should thus find general use as a convenient, non-destructive method for sensitive anal. of solid-phase org. chem.
IT 2188-18-3DP, resin-bound
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(photoacoustic FTIR spectroscopy for monitoring of solid-phase synthesis of (cyanobenzoyl)dehydroalanine)
RN 2188-18-3 HCPLUS
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

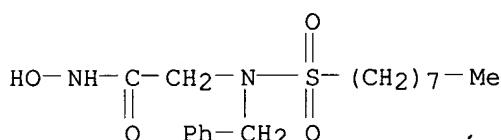


| | | |
|--------------|--------------|--------------|
| 182297-58-1P | 182297-59-2P | 182297-60-5P |
| 182297-61-6P | 182297-62-7P | 182297-63-8P |
| 182297-64-9P | 182297-65-0P | 182297-66-1P |
| 182297-67-2P | 182297-68-3P | 182297-69-4P |
| 182297-70-7P | 182297-71-8P | 182297-72-9P |
| 182297-73-0P | 182297-74-1P | 182297-75-2P |
| 182297-76-3P | 182297-77-4P | 182297-78-5P |
| 182297-79-6P | 182297-80-9P | 182297-81-0P |

RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(matrix metalloproteinase inhibitor; synthesis of hydroxamic acid derivs. using **solid supports** functionalized with (protected) hydroxylamine)

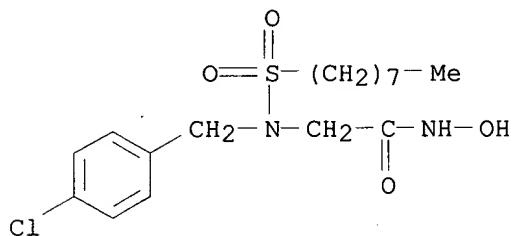
BN 174857-80-8 HCAPLUS

CN Acetamide, N-hydroxy-2-[(octylsulfonyl)(phenylmethyl)amino]- (9CI) (CA INDEX NAME)



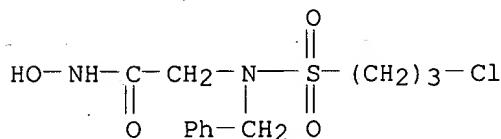
BN 174857-88-6 HCAPLUS

INN 17455-33-0 IUPAC CN Acetamide, 2-[[[(4-chlorophenyl)methyl]octylsulfonyl]amino]-N-hydroxy-(9CI) (CA INDEX NAME)



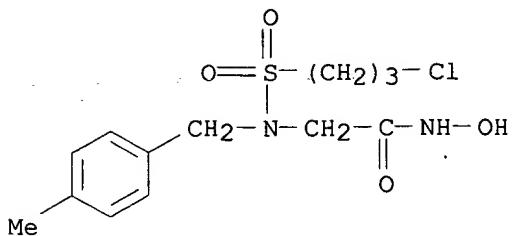
RN 182297-48-9 HCAPLUS

CN Acetamide, 2-[[[3-chloropropyl)sulfonyl](phenylmethyl)amino]-N-hydroxy-
(9CI) (CA INDEX NAME)



RN 182297-49-0 HCAPLUS

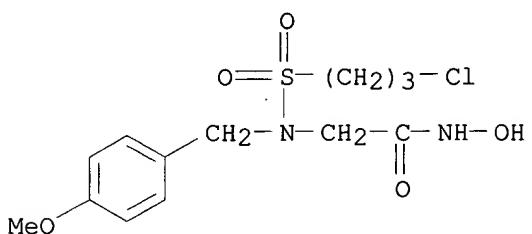
CN Acetamide, 2-[[[3-chloropropyl)sulfonyl][(4-methylphenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 182297-50-3 HCPLUS

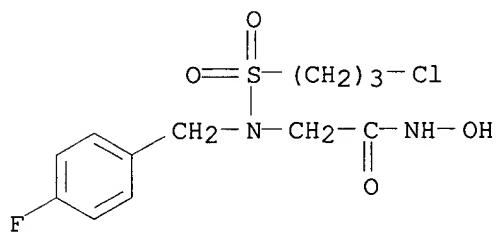
CN Acetamide,

2-[(3-chloropropyl)sulfonyl][(4-methoxyphenyl)methyl]amino-N-hydroxy- (9CI) (CA INDEX NAME)



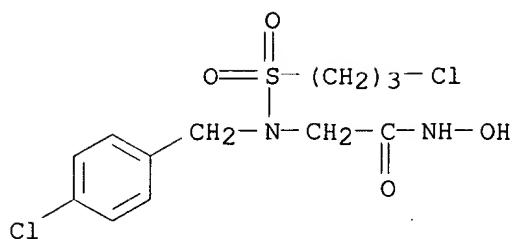
RN 182297-51-4 HCPLUS

CN Acetamide, 2-[(3-chloropropyl)sulfonyl][(4-fluorophenyl)methyl]amino-N-hydroxy- (9CI) (CA INDEX NAME)



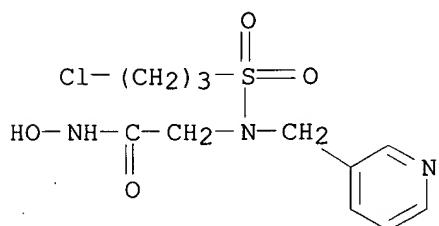
RN 182297-52-5 HCPLUS

CN Acetamide, 2-[(4-chlorophenyl)methyl][(3-chloropropyl)sulfonyl]amino-N-hydroxy- (9CI) (CA INDEX NAME)

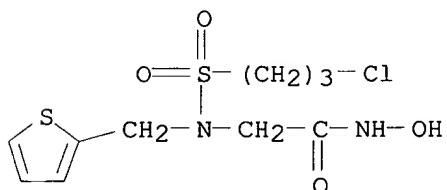


RN 182297-53-6 HCPLUS

CN Acetamide, 2-[[(3-chloropropyl)sulfonyl](3-pyridinylmethyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)

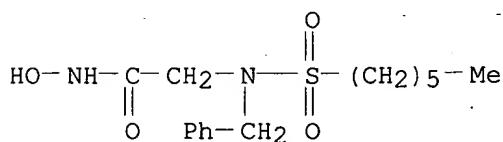


RN 182297-54-7 HCPLUS

CN Acetamide,
2-[[(3-chloropropyl)sulfonyl](2-thienylmethyl)amino]-N-hydroxy-
(9CI) (CA INDEX NAME)

RN 182297-55-8 HCPLUS

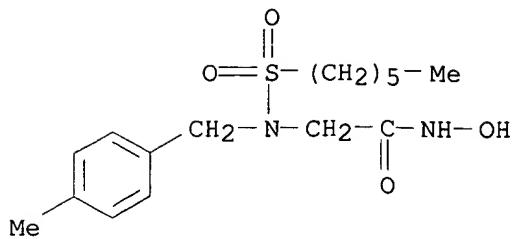
CN Acetamide, 2-[[(hexylsulfonyl)(phenylmethyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)



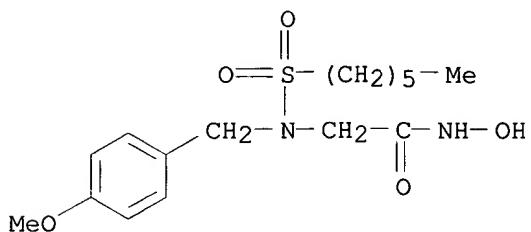
RN 182297-56-9 HCPLUS

CN Acetamide, 2-[[(hexylsulfonyl)[(4-methylphenyl)methyl]amino]-N-hydroxy-
(9CI) (CA INDEX NAME)

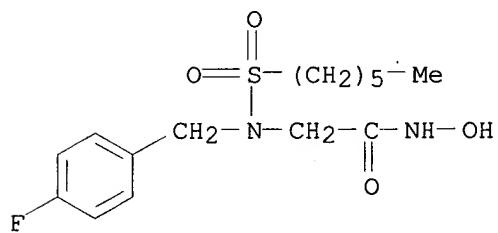
Searched by John Dantzman 308-4488



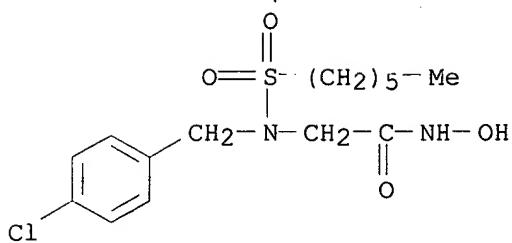
RN 182297-57-0 HCPLUS
CN Acetamide, 2-[(hexylsulfonyl)[(4-methoxyphenyl)methyl]amino]-N-hydroxy-
(9CI) (CA INDEX NAME)



RN 182297-58-1 HCPLUS
CN Acetamide, 2-[([(4-fluorophenyl)methyl](hexylsulfonyl)amino]-N-hydroxy-
(9CI) (CA INDEX NAME)

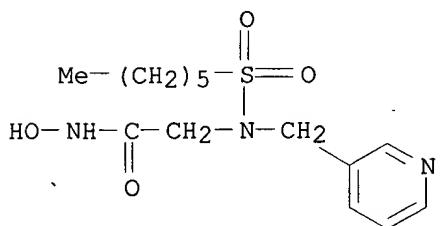


RN 182297-59-2 HCPLUS
CN Acetamide, 2-[([(4-chlorophenyl)methyl](hexylsulfonyl)amino]-N-hydroxy-
(9CI) (CA INDEX NAME)



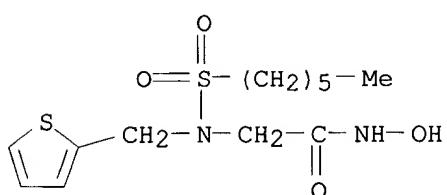
RN 182297-60-5 HCPLUS

CN Acetamide, 2-[(hexylsulfonyl)(3-pyridinylmethyl)amino]-N-hydroxy- (9CI)
(CA INDEX NAME)



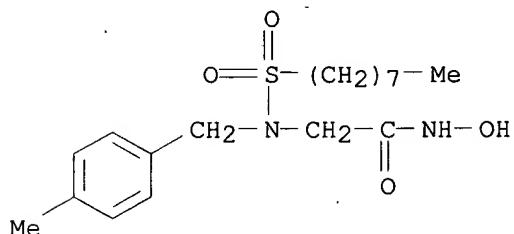
RN 182297-61-6 HCPLUS

CN Acetamide, 2-[(hexylsulfonyl)(2-thienylmethyl)amino]-N-hydroxy- (9CI)
(CA INDEX NAME)

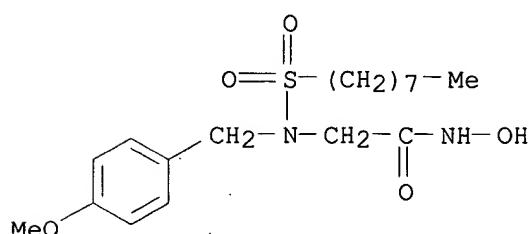


RN 182297-62-7 HCPLUS

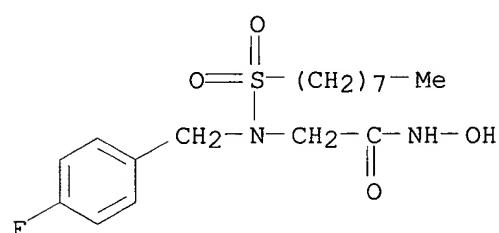
CN Acetamide, N-hydroxy-2-[[[(4-methylphenyl)methyl](octylsulfonyl)amino]- (9CI) (CA INDEX NAME)



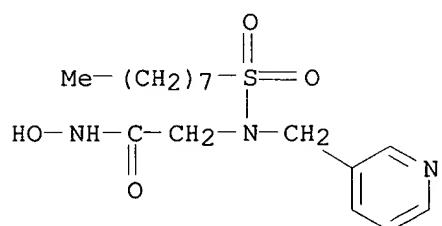
RN 182297-63-8 HCPLUS
 CN Acetamide, N-hydroxy-2-[(4-methoxyphenyl)methyl](octylsulfonyl)amino]-
 (9CI) (CA INDEX NAME)



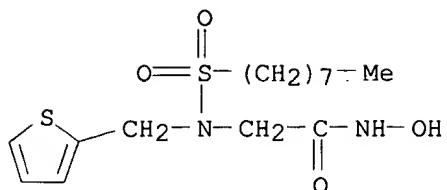
RN 182297-64-9 HCPLUS
 CN Acetamide, 2-[(4-fluorophenyl)methyl](octylsulfonyl)amino]-N-hydroxy-
 (9CI) (CA INDEX NAME)



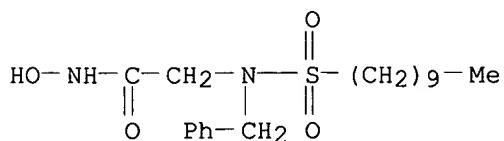
RN 182297-65-0 HCPLUS
 CN Acetamide, N-hydroxy-2-[(octylsulfonyl)(3-pyridinylmethyl)amino]- (9CI)
 (CA INDEX NAME)



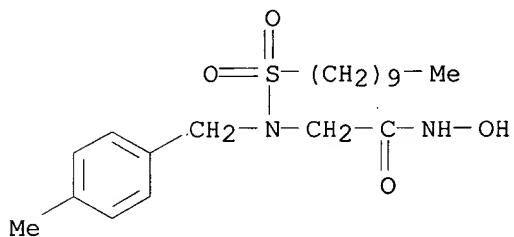
RN 182297-66-1 HCPLUS
 CN Acetamide, N-hydroxy-2-[(octylsulfonyl)(2-thienylmethyl)amino]- (9CI)
 (CA INDEX NAME)



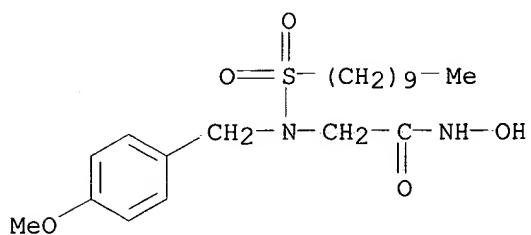
RN 182297-67-2 HCPLUS
CN Acetamide, 2-[(decylsulfonyl) (phenylmethyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)



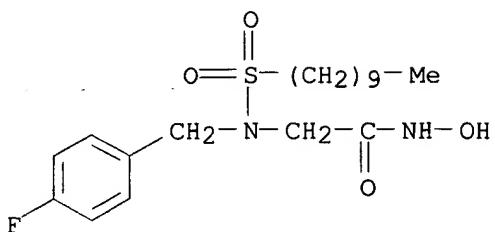
RN 182297-68-3 HCPLUS
CN Acetamide, 2-[(decylsulfonyl) [(4-methylphenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



RN 182297-69-4 HCPLUS
CN Acetamide, 2-[(decylsulfonyl) [(4-methoxyphenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)

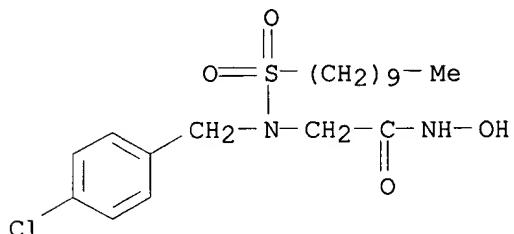


RN 182297-70-7 HCPLUS
CN Acetamide, 2-[(decylsulfonyl) [(4-fluorophenyl)methyl]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



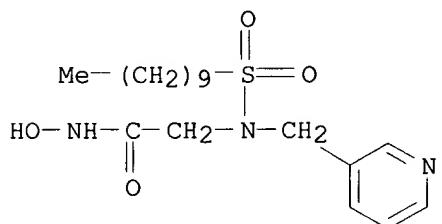
RN 182297-71-8 HCPLUS

CN Acetamide, 2-[[(4-chlorophenyl)methyl](decylsulfonyl)amino]-N-hydroxy- (9CI) (CA INDEX NAME)



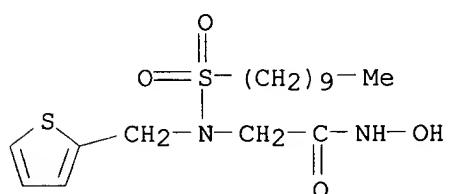
RN 182297-72-9 HCPLUS

CN Acetamide, 2-[[(decylsulfonyl)(3-pyridinylmethyl)amino]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



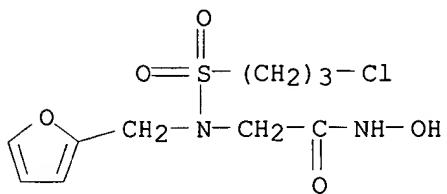
RN 182297-73-0 HCPLUS

CN Acetamide, 2-[[(decylsulfonyl)(2-thienylmethyl)amino]amino]-N-hydroxy- (9CI) (CA INDEX NAME)



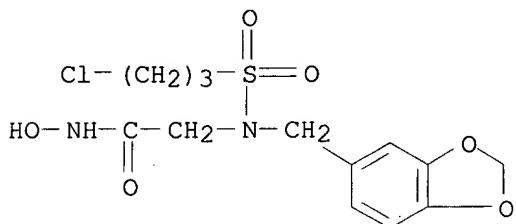
RN 182297-74-1 HCPLUS

CN Acetamide,

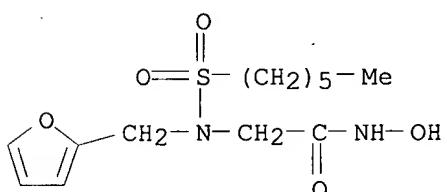
2-[(3-chloropropyl)sulfonyl](2-furanylmethyl)amino]-N-hydroxy-
(9CI) (CA INDEX NAME)

RN 182297-75-2 HCPLUS

CN Acetamide,

2-[(1,3-benzodioxol-5-ylmethyl)[(3-chloropropyl)sulfonyl]amino]-
N-hydroxy- (9CI) (CA INDEX NAME)

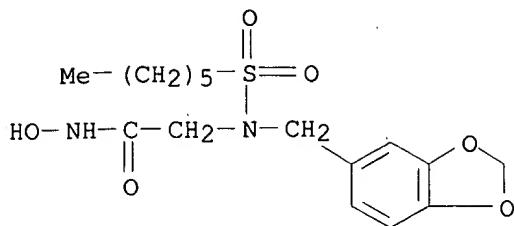
RN 182297-76-3 HCPLUS

CN Acetamide, 2-[(2-furanylmethyl)(hexylsulfonyl)amino]-N-hydroxy- (9CI)
(CA INDEX NAME)

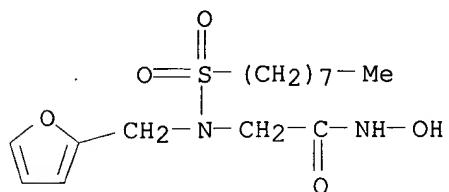
RN 182297-77-4 HCPLUS

CN Acetamide,

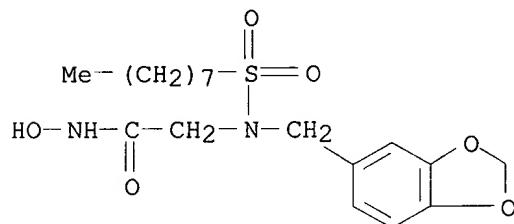
2-[(1,3-benzodioxol-5-ylmethyl)(hexylsulfonyl)amino]-N-hydroxy-
(9CI) (CA INDEX NAME)



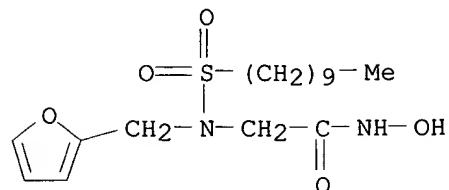
RN 182297-78-5 HCPLUS
CN Acetamide, 2-[(2-furanyl methyl) (octylsulfonyl) amino] - N-hydroxy- (9CI)
(CA INDEX NAME)



RN 182297-79-6 HCPLUS
CN Acetamide,
2-[(1,3-benzodioxol-5-yl methyl) (octylsulfonyl) amino] - N-hydroxy-
(9CI) (CA INDEX NAME)

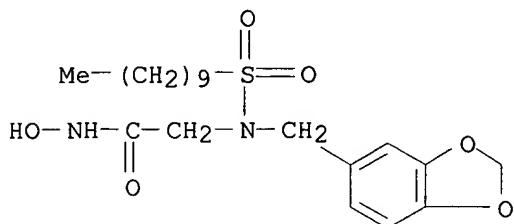


RN 182297-80-9 HCPLUS
CN Acetamide, 2-[(decylsulfonyl) (2-furanyl methyl) amino] - N-hydroxy- (9CI)
(CA INDEX NAME)



RN 182297-81-0 HCPLUS

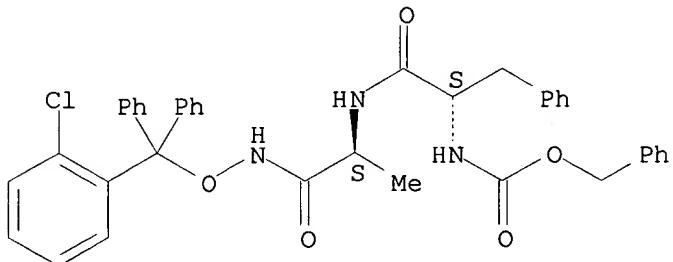
CN Acetamide,

2-[(1,3-benzodioxol-5-ylmethyl)(decylsulfonyl)amino]-N-hydroxy-
(9CI) (CA INDEX NAME)IT 182297-82-1DP, polymer bound 182297-83-2DP, polymer
bound 182297-84-3DP, polymer bound 182297-85-4DP,
polymer boundRL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(synthesis of hydroxamic acid derivs. using solid
supports functionalized with (protected) hydroxylamine)

RN 182297-82-1 HCPLUS

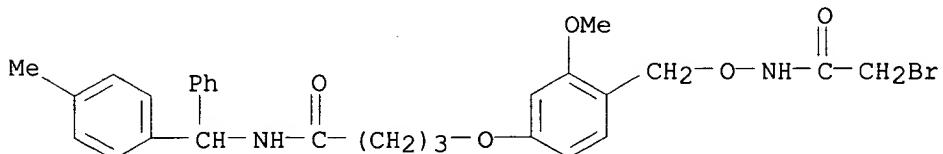
CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-[(2-
chlorophenyl)diphenylmethoxy]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 182297-83-2 HCPLUS

CN Butanamide,

4-[4-[[[(bromoacetyl)amino]oxy]methyl]-3-methoxyphenoxy]-N-[(4-
methylphenyl)phenylmethyl]- (9CI) (CA INDEX NAME)

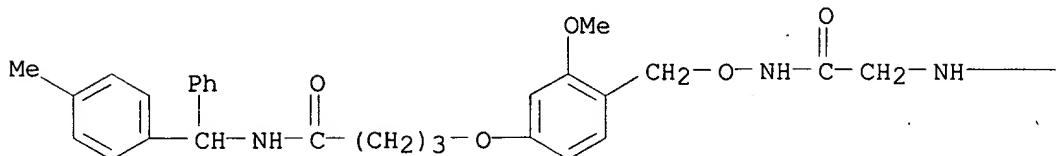
RN 182297-84-3 HCPLUS

CN Butanamide,

4-[3-methoxy-4-[[[[[phenylmethyl)amino]acetyl]amino]oxy]methyl]
Searched by John Dantzman 308-4488

1]phenoxy]-N-[(4-methylphenyl)phenylmethyl]- (9CI) (CA INDEX NAME)

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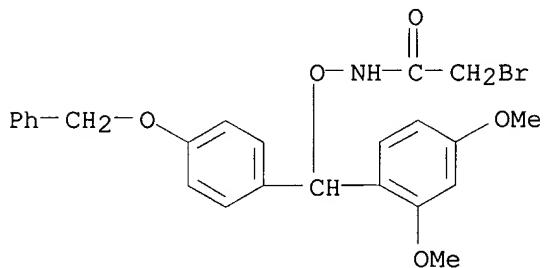


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—CH₂—Ph

RN 182297-85-4 HCPLUS

CN Acetamide, 2-bromo-N-[(2,4-dimethoxyphenyl)[4-(phenylmethoxy)phenyl]methoxy]- (9CI) (CA INDEX NAME)



IT 95921-85-0P 123984-00-9P 161314-35-8P

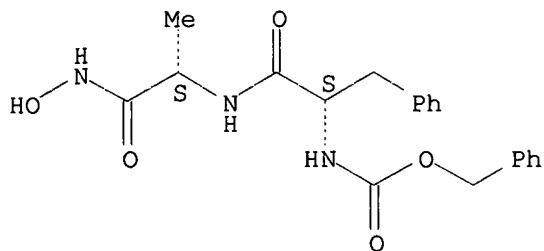
174777-69-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of hydroxamic acid derivs. using **solid supports** functionalized with (protected) hydroxylamine)

RN 95921-85-0 HCPLUS

CN L-Alaninamide, N-[(phenylmethoxy)carbonyl]-L-phenylalanyl-N-hydroxy-
(9CI)
(CA INDEX NAME)

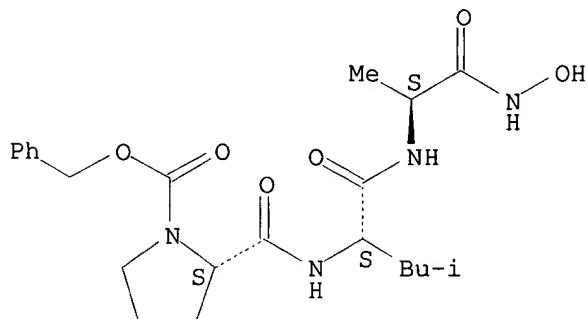
Absolute stereochemistry.



RN 123984-00-9 HCAPLUS

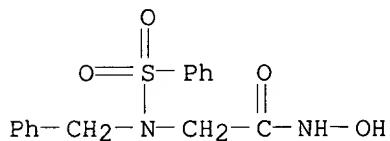
CN L-Alaninamide, 1-[(phenylmethoxy)carbonyl]-L-prolyl-L-leucyl-N-hydroxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 161314-35-8 HCAPLUS

CN Acetamide, N-hydroxy-2-[(phenylmethyl)(phenylsulfonyl)amino]- (9CI) (CA INDEX NAME)



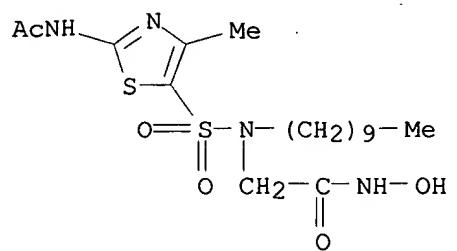
RN 174777-69-6 HCAPLUS

CN Acetamide,
2-[[2-(acetylamino)-4-methyl-5-thiazolyl]sulfonyl]decylamino-N-hydroxy- (9CI) (CA INDEX NAME)

McCarthy

09/122576

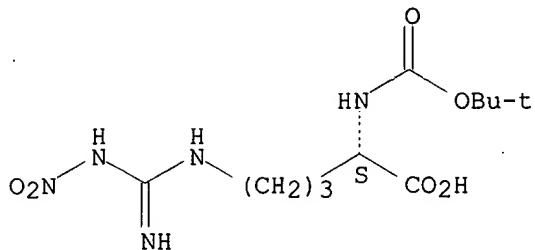
Page 16



=> d bib abs hitstr 24

L23 ANSWER 24 OF 52 HCPLUS COPYRIGHT 1999 ACS
AN 1996:617221 HCPLUS
DN 126:8597
TI Side reactions in solid-phase peptide synthesis and their applications
AU Hsieh, Kun-Hwa; Demaine, Margaret M.; Gurusidaiah, S.
CS Dep. Veterinary Comparative Anatomy, Pharmacol. Physiology, Washington State Univ., Pullman, WA, USA
SO Int. J. Pept. Protein Res. (1996), 48(3), 292-298
CODEN: IJPPC3; ISSN: 0367-8377
PB Munksgaard
DT Journal
LA English
AB Side reactions in peptide synthesis indicate steps needing improvement as well as opportunities for structural diversification in combinatorial design. Among the side reactions obsd. in this study, transesterification of Boc-Glu(OBzl) occurred in TMAH-catalyzed **resin** attachment, leading to Boc-DKKREE(OMe) in solid-phase synthesis of Boc-DKKREE. Acetylation of Boc-Arg(NO₂)-**resin** occurred during **resin** capping with Ac₂O/Et₃N, leading to GPR(Ac) in GPR synthesis. His- and Lys-modification occurred during GHRPLDKKREE cleavage from **resin** by Pd(OAc)₂-catalyzed hydrogenation in DMF. To verify these side reactions, model expts. were performed, which indicated rapid transesterification of Boc-Glu(OBzl) in Me, iso-Pr, or tert-Bu alc. into the corresponding ester by TMAH, but not by Cs. This TMAH ability was used to devise a convenient procedure for peptide cleavage. TLC studies of acetylation showed that both Boc-Arg(NO₂) and Boc-Arg(Tos) were stable to Ac-Im treatment, but were modified by Ac₂O/Et₃N. Since transfer hydrogenation of Boc-His(Bzl) and Boc-Lys(Z) in HCO₂H or ammonium formate did not generate the formylated side-products of catalytic hydrogenation, DMF and not its decompd. product, HCO₂H, appears to be involved in side-chain modification. Elimination of the side reactions, by using Cs-derived Boc-Glu(OBzl)-**resin** for peptide synthesis and catalytic hydrogenation in NMP-HOPr for peptide cleavage, increased the GHRPLDKKREE yield by 1/3. On the other hand, the side reactions provided modified peptides, whose bioassays revealed different importance of the modified side-chains.
IT 2188-18-3 2188-18-3D, **resin**-bound
RL: RCT (Reactant)
 (side reactions in **solid-phase peptide synthesis** and their applications)
RN 2188-18-3 HCPLUS
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

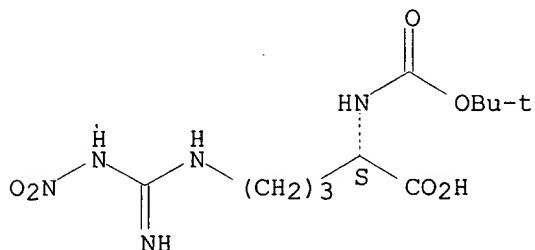
Absolute stereochemistry.



RN 2188-18-3 HCPLUS

CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 183898-51-3DP, resin-bound 183898-52-4DP,
resin-bound 183898-52-4P 183898-53-5DP,

resin-bound

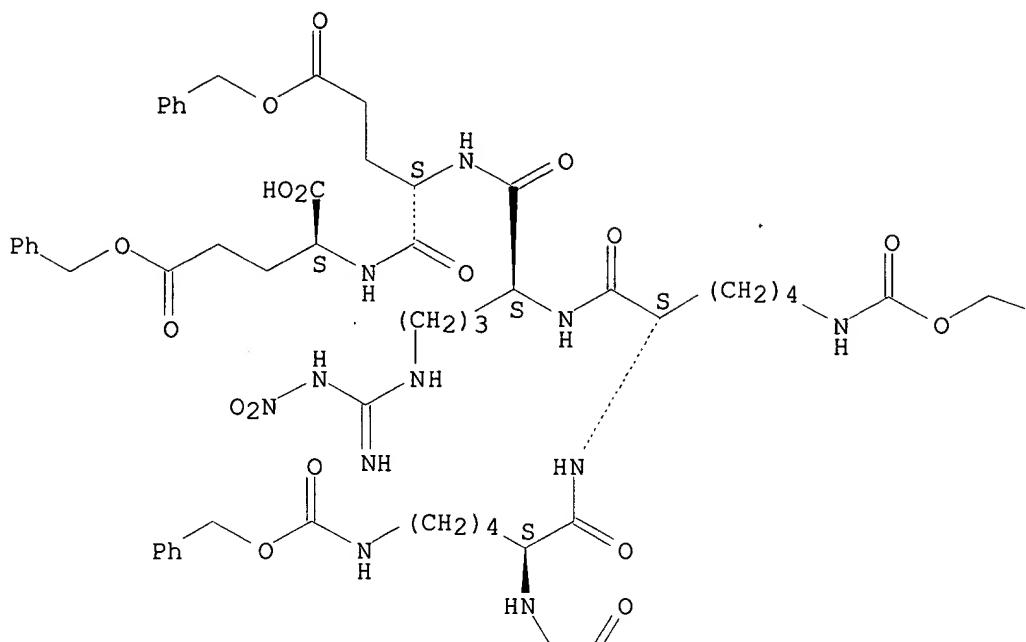
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(side reactions in solid-phase peptide
synthesis and their applications)

RN 183898-51-3 HCPLUS

CN L-Glutamic acid, N-[(1,1-dimethylethoxy)carbonyl]-L-.alpha.-aspartyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-N5-[imino(nitroamino)methyl]-L-ornithyl-L-.alpha.-glutamyl-,
1,5,65-tris(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

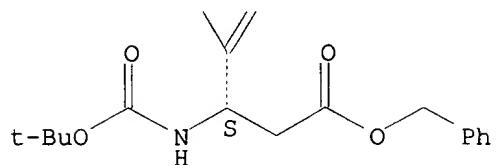
PAGE 1-A



PAGE 1-B

Ph

PAGE 2-A



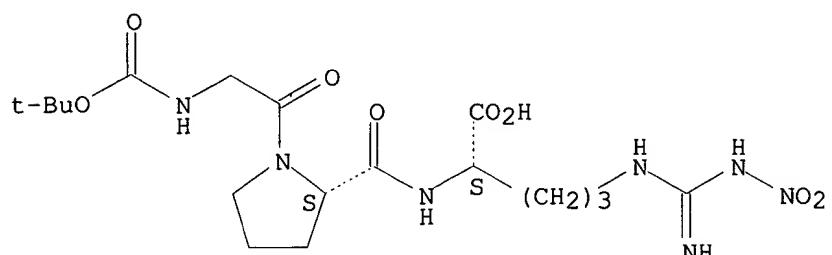
RN 183898-52-4 HCPLUS

Searched by John Dantzman

308-4488

CN L-Ornithine, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-prolyl-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

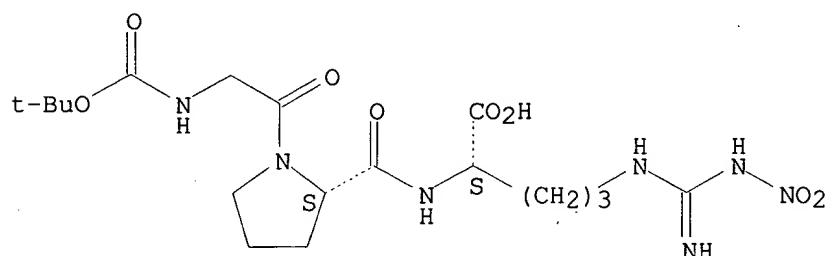
Absolute stereochemistry.



RN 183898-52-4 HCPLUS

CN L-Ornithine, N-[(1,1-dimethylethoxy)carbonyl]glycyl-L-prolyl-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



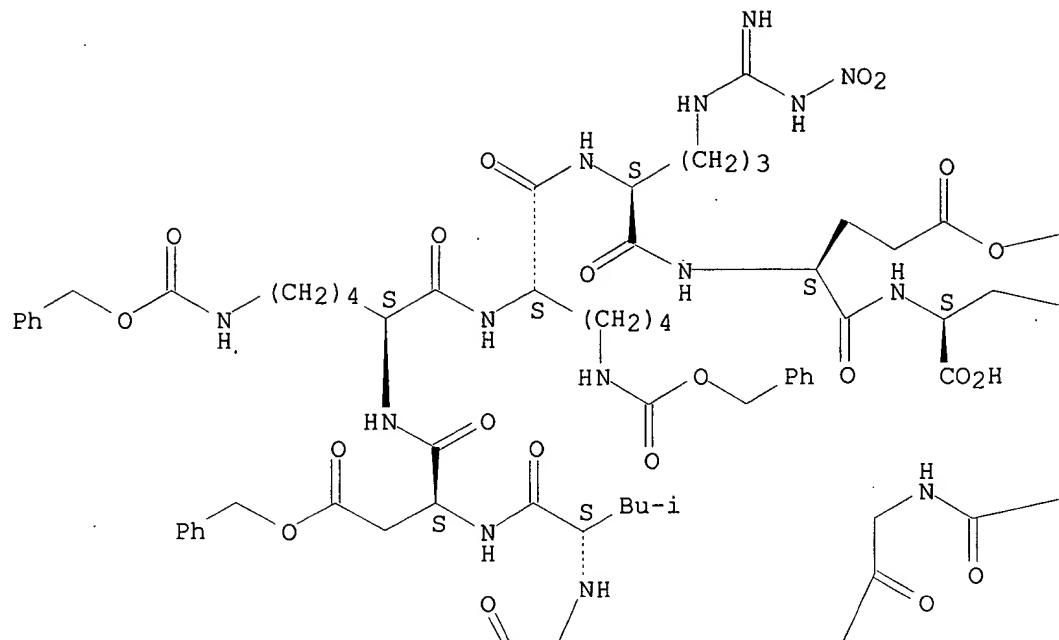
RN 183898-53-5 HCPLUS

CN L-Glutamic acid,
N-[(1,1-dimethylethoxy)carbonyl]glycyl-1-(phenylmethyl)-L-histidyl-N5-[imino(nitroamino)methyl]-L-ornithyl-L-prolyl-L-leucyl-L-.alpha.-aspartyl-N6-[(phenylmethoxy)carbonyl]-L-lysyl-N6-

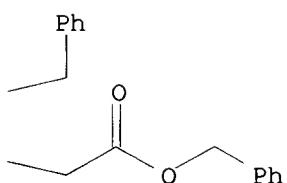
[(phenylmethoxy)carbonyl]-L-lysyl-N5-[imino(nitroamino)methyl]-L-ornithyl-L-.alpha.-glutamyl-, 6,10,115-tris(phenylmethyl) ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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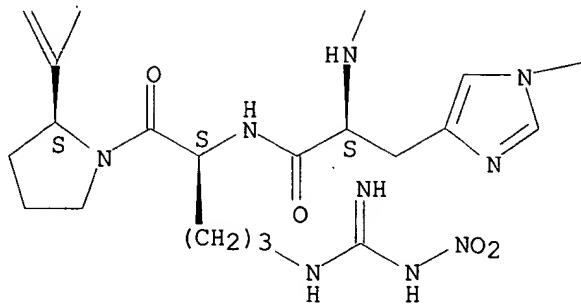
—OBu-t

McCarthy

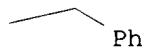
09/122576

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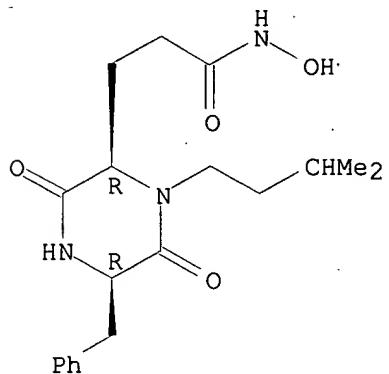


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(phenylmethyl)-, (2R-cis)- (9CI) (CA INDEX NAME)

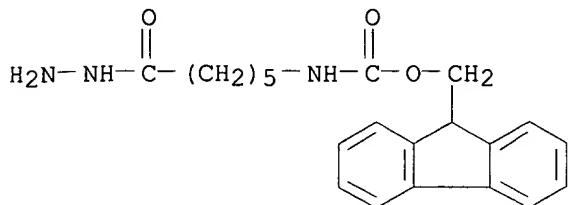
Absolute stereochemistry.



phase synthesis of peptide hydrazides)

RN 174800-73-8 HCPLUS

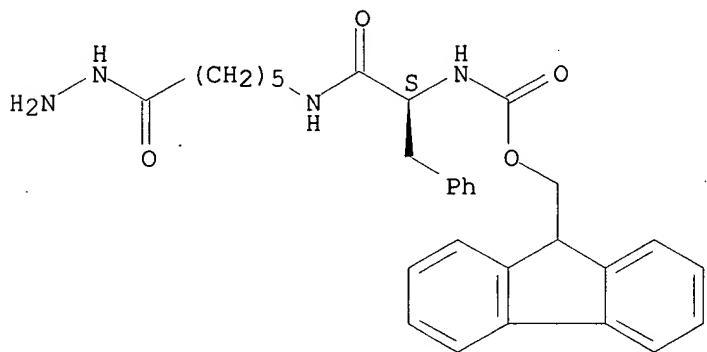
CN Hexanoic acid, 6-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-, hydrazide
(9CI) (CA INDEX NAME)



RN 174800-74-9 HCPLUS

CN Hexanoic acid, 6-[[2-[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxo-3-phenylpropyl]amino]-, hydrazide, (S)- (9CI) (CA INDEX NAME)

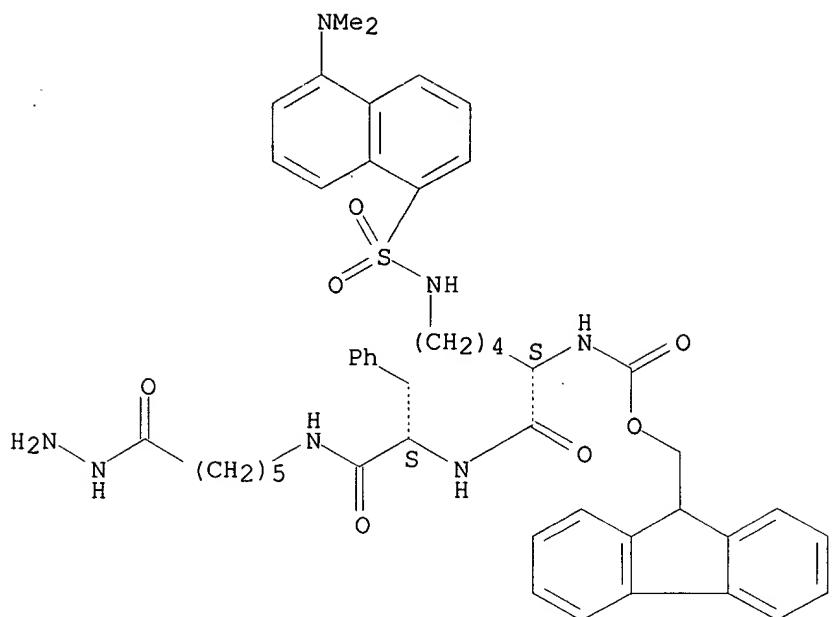
Absolute stereochemistry.



RN 174800-75-0 HCPLUS

CN L-Phenylalaninamide, N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

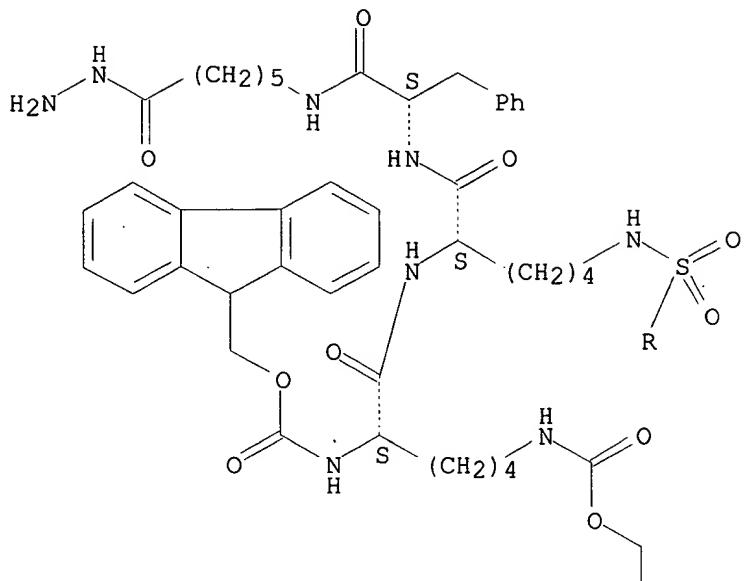


RN 174800-76-1 HCPLUS

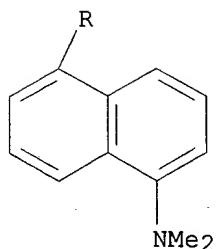
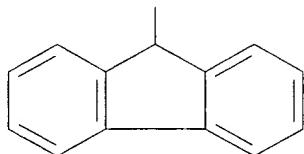
CN L-Phenylalaninamide, N2,N6-bis[(9H-fluoren-9-ylmethoxy)carbonyl]-L-lysyl-N6-[5-(dimethylamino)-1-naphthalenylsulfonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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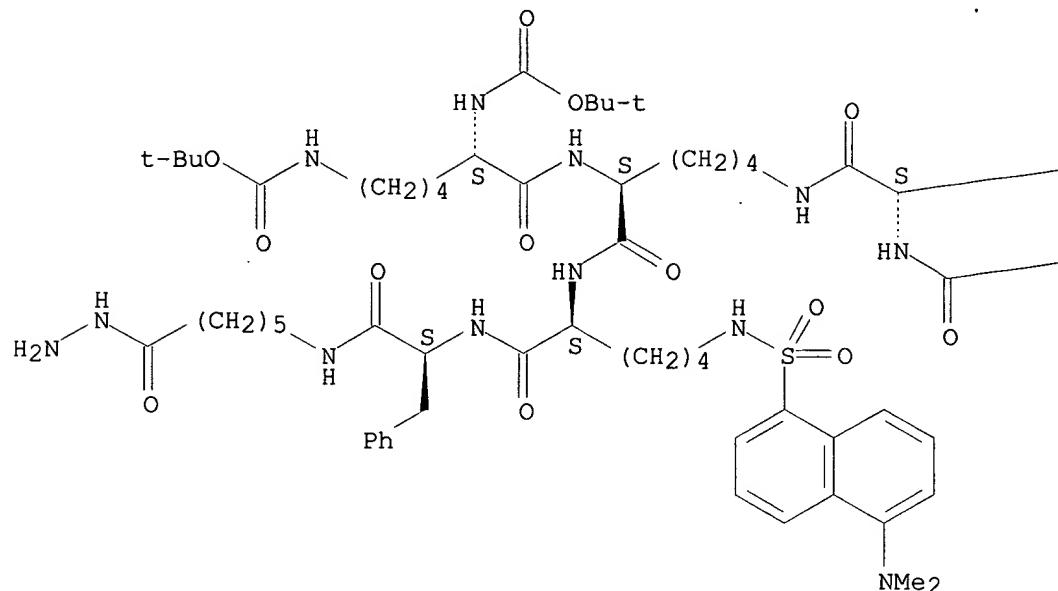
PAGE 2-A



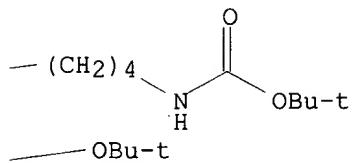
RN 174800-77-2 HCPLUS
CN L-Phenylalaninamide, N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl-N6-[N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl]-L-lysyl-N6-[(5-(dimethylamino)-1-naphthalenyl)sulfonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.

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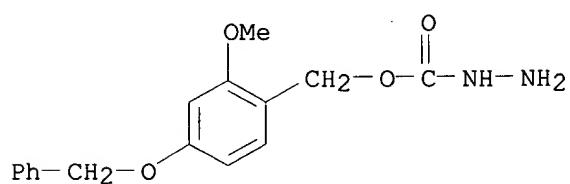


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RN 174800-82-9 HCPLUS

CN Hydrazinecarboxylic acid, [2-methoxy-4-(phenylmethoxy)phenyl]methyl ester
(9CI) (CA INDEX NAME)



IT 174800-77-2P 174800-78-3P

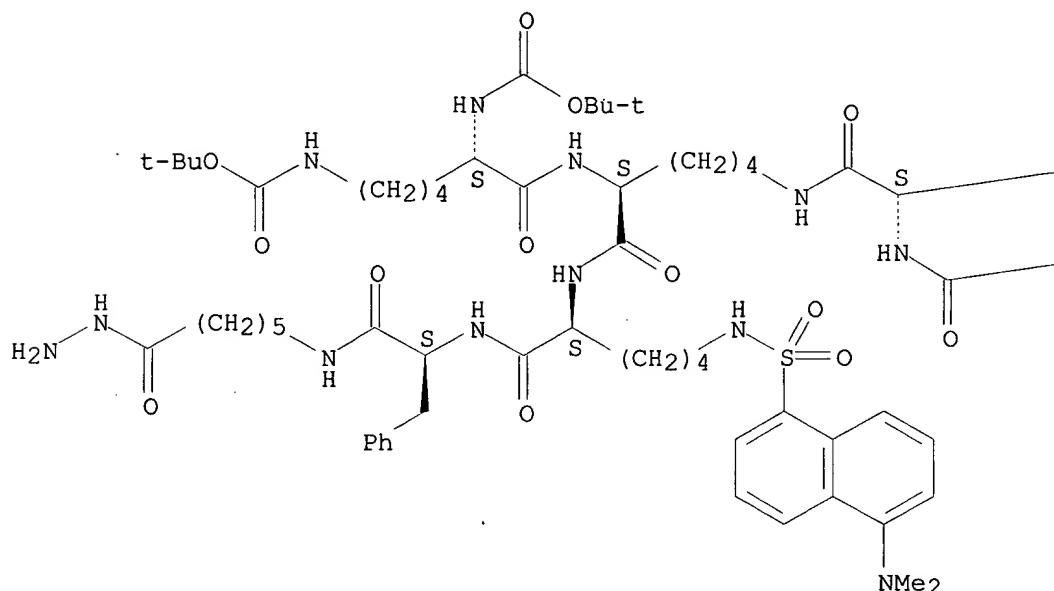
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of resin supports for use in solid
 phase synthesis of peptide hydrazides)

RN 174800-77-2 HCPLUS

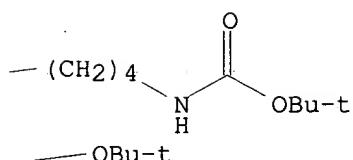
CN L-Phenylalaninamide, N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl-N6-[N2,N6-bis[(1,1-dimethylethoxy)carbonyl]-L-lysyl]-L-lysyl-N6-[[5-(dimethylamino)-1-naphthalenyl]sulfonyl]-L-lysyl-N-(6-hydrazino-6-oxohexyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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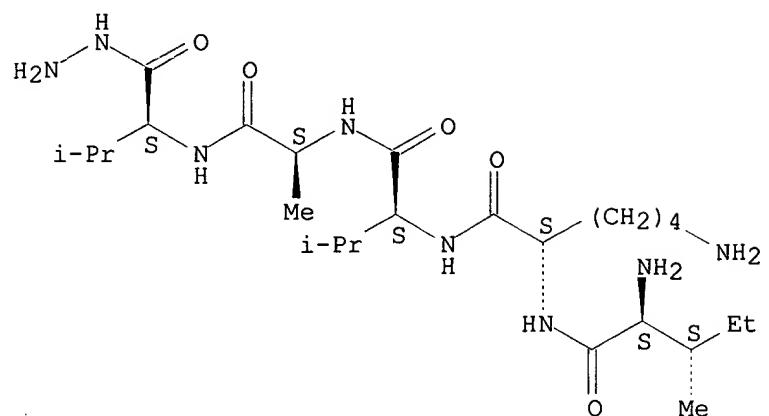
PAGE 1-B



RN 174800-78-3 HCPLUS

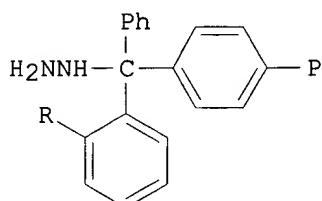
CN L-Valine, N-[N-(N2-L-isoleucyl-L-lysyl)-L-valyl]-L-alanyl-, hydrazide
 (9CI) (CA INDEX NAME)

Absolute stereochemistry.

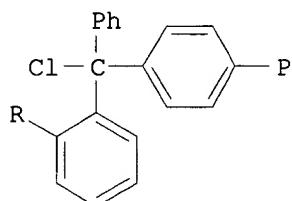


=> d bib abs hitstr 27

L23 ANSWER 27 OF 52 HCAPLUS COPYRIGHT 1999 ACS
 AN 1996:86347 HCAPLUS
 DN 124:233130
 TI Preparation of polymer-bound trityl-hydrazines and their application in
 the solid phase synthesis of partially protected peptide hydrazides
 AU Stravropoulos, George; Gatos, Dimitrios; Magafa, Vassiliki; Barlos,
 Kleomenis
 CS Dep. Chem., Univ. Patras, Patras, 26500, Greece
 SO Lett. Pept. Sci. (1996), 2(5), 315-18
 CODEN: LPSCEM; ISSN: 0929-5666
 DT Journal
 LA English
 GI



I



II

AB Polymer-bound N-tritylhydrazines I ($R = H, Cl$; P = polystyrene polymer support) were easily prepd. by reacting polymeric trityl chlorides II with hydrazine. Subsequently, I were successfully applied to the solid phase synthesis of partially protected peptide hydrazides using 1-hydroxybenzotriazolyl esters of 9-fluorenylmethoxycarbonyl (Fmoc)- or tritylamino acids. The synthesized peptide hydrazides can be quant.

split

off from the resins by mild acidic treatment, while the benzyl and tert-Bu protecting groups remain unaffected.

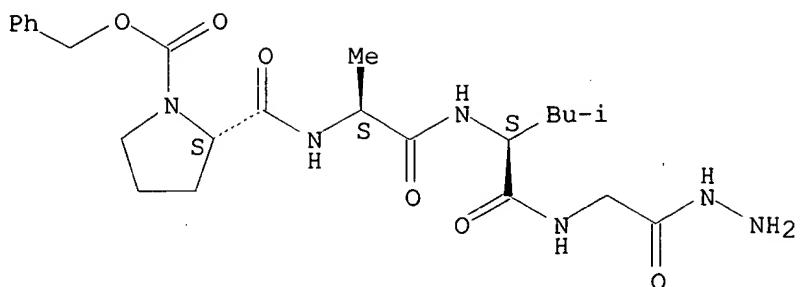
IT 174872-59-4P 174872-60-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of polymer-bound tritylhydrazines and use in solid phase synthesis of peptide hydrazides)

RN 174872-59-4 HCAPLUS

CN Glycine, N-[N-[N-[(phenylmethoxy)carbonyl]-L-prolyl]-L-alanyl]-L-leucyl]-, hydrazide (9CI) (CA INDEX NAME)

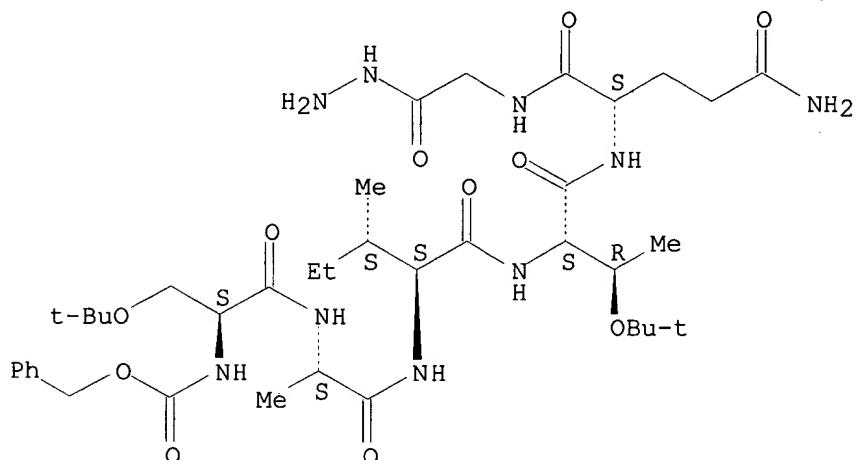
Absolute stereochemistry.



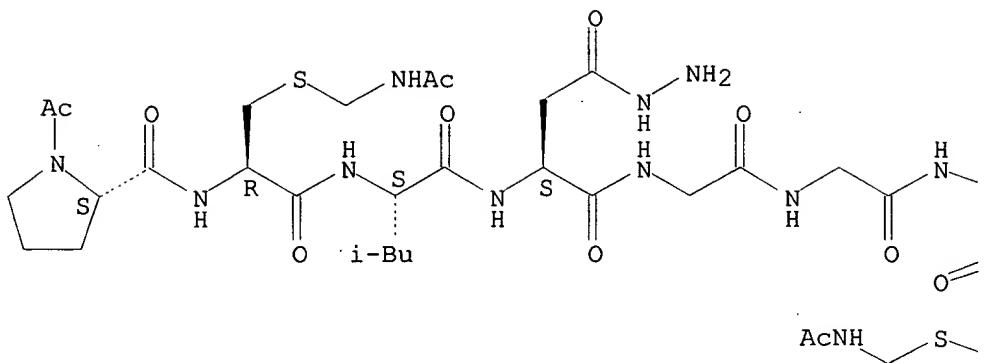
RN 174872-60-7 HCPLUS

CN Glycine, N-[N2-[O-(1,1-dimethylethyl)-N-[N-[O-(1,1-dimethylethyl)-N-[(phenylmethoxy)carbonyl]-L-seryl]-L-alanyl]-L-isoleucyl]-L-threonyl]-L-glutamyl]-, hydrazide (9CI) (CA INDEX NAME)

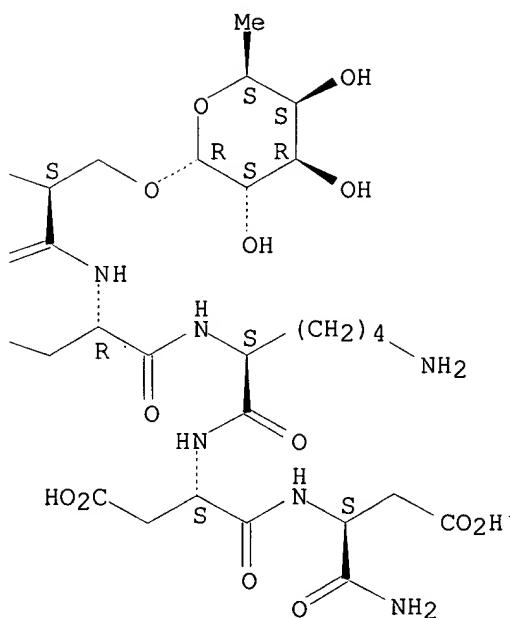
Absolute stereochemistry.



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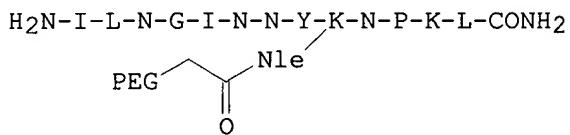
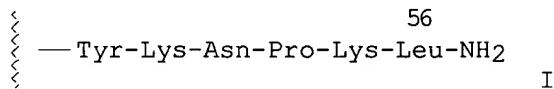
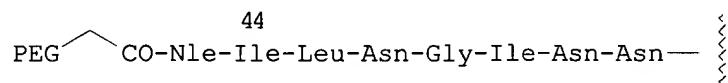


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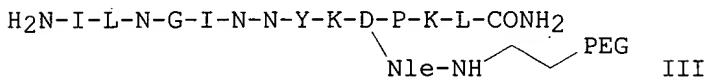


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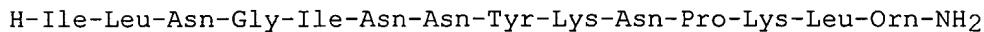
L23 ANSWER 29 OF 52 HCAPLUS COPYRIGHT 1999 ACS
 AN 1994:656270 HCAPLUS
 DN 121:256270
 TI Pegylated peptides. II. Solid-phase synthesis of amino-, carboxy- and side-chain pegylated peptides
 AU Lu, Yi An; Felix, Arthur M.
 CS Roche Res. Cent., Hoffmann-La Roch Inc., Nutley, NJ, USA
 SO Int. J. Pept. Protein Res. (1994), 43(2), 127-38
 CODEN: IJPPC3; ISSN: 0367-8377
 DT Journal
 LA English
 GI



II



III



IV

AB General procedures are presented for the site-specific pegylation of peptides at the NH₂-terminus, side-chain positions (Lys or Asp/Glu) or COOH-terminus using solid-phase Fmoc/tert-Bu methodologies. A model tridecapeptide fragment of interleukin-2, IL-2(44-56)-NH₂, was chosen for this study since it possesses several trifunctional amino acids which serve as potential sites for pegylation. The pegylation reagents were designed to contain either Nle or Orn, which served as diagnostic amino acids for confirming the presence of 1 PEG unit per mol of peptide. NH₂-terminal pegylation was carried out by coupling PEG-CH₂CO-Nle-OH to the free NH₂-terminus of the peptide-resin. Side-chain pegylation of Lys or Asp was achieved by one of two pathways. Direct Searched by John Dantzman 308-4488

side-chain pegylation was accomplished by coupling with Fmoc-Lys(PEG-CH₂CO-Nle)-OH or Fmoc-Asp(Nle-NH-CH₂CH₂-PEG)-OH, followed by solid-phase assemblage of the pegylated peptide-resin and TFA cleavage. Alternatively, allylic protective groups were introduced via Fmoc-Lys(Alloc)-OH or Fmoc-Asp(O-Allyl)-OH, and selectively removed by palladium-catalyzed deprotection after assemblage of the peptide-resin. Solid-phase pegylation of the side-chain of Lys or Asp was then carried out in the final stage with PEG-CH₂CO-Nle-OH or H-Nle-NH-(CH₂)₂-PEG, resp. COOH-Terminal pegylation was achieved through the initial attachment of Fmoc-Orn(PEG-CH₂CO)-OH to the solid support, followed by solid-phase peptide synthesis using the Fmoc/tBu strategy. The pegylated peptides I, II, III, and IV were purified by dialysis and preparative HPLC and were fully characterized by anal. HPLC, amino acid anal., ¹H-NMR spectroscopy and laser desorption mass spectrometry.

IT 158621-98-8DP, amide with [p-(.alpha.-amino-2,4-

dimethoxybenzyl)phenoxy]acetamide resin

RL: SPN (Synthetic preparation); PREP (Preparation)

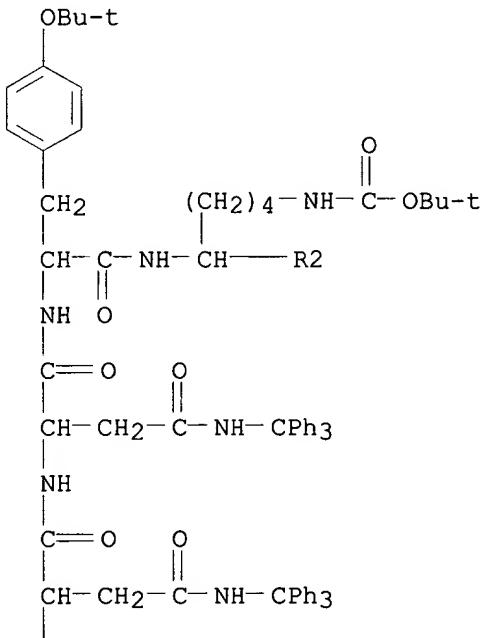
(prepn. of, as intermediate in **solid-phase**

synthesis of pegylated peptide)

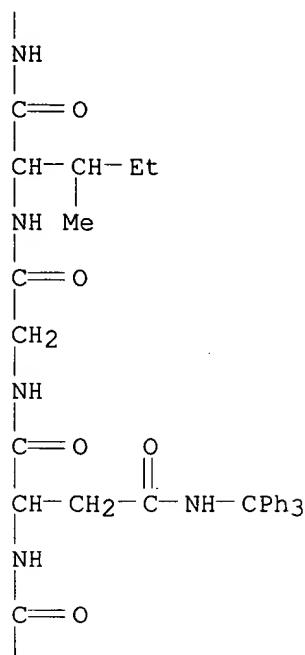
RN 158621-98-8 HCPLUS

CN Poly(oxy-1,2-ethanediyl), .alpha.-methyl-.omega.-hydroxy-, ether with N-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-isoleucyl-L-leucyl-N-(triphenylmethyl)-L-asparaginylglycyl-L-isoleucyl-N-(triphenylmethyl)-L-asparaginyl-N-(triphenylmethyl)-L-asparaginyl-O-(1,1-dimethylethyl)-L-tyrosyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-N-[1-[(2-hydroxyethyl)amino]carbonyl]pentyl]-L-asparaginyl-L-prolyl-N6-[(1,1-dimethylethoxy)carbonyl]-L-lysyl-L-leucine (9CI) (CA INDEX NAME)

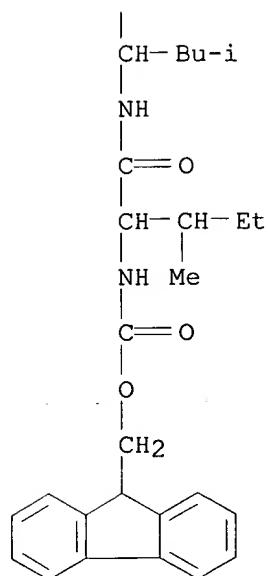
PAGE 1-A



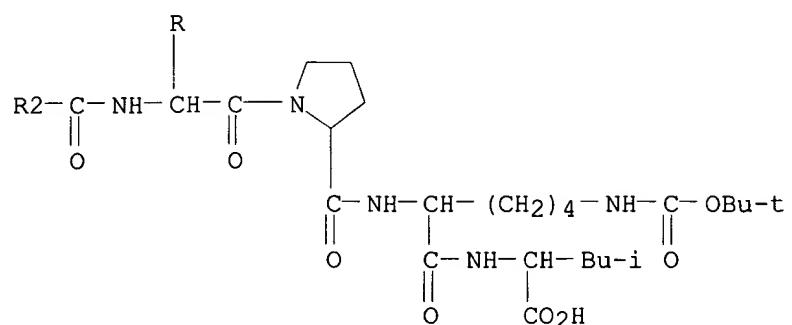
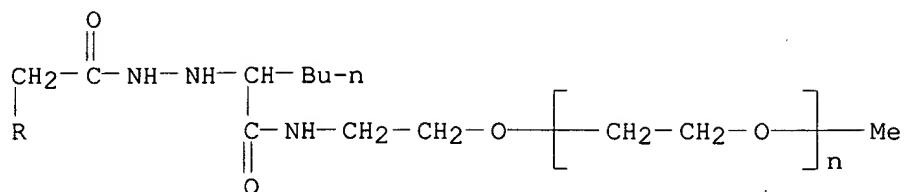
PAGE 2-A

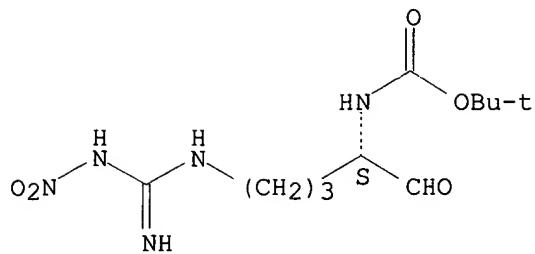


PAGE 3-A



PAGE 4-A



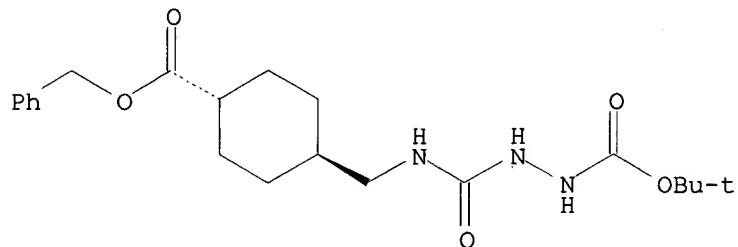


RN 139976-26-4 HCPLUS

CN Hydrazinecarboxylic acid,

2-[[[trans-4-[(phenylmethoxy)carbonyl]cyclohexyl]methyl]amino]carbonyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

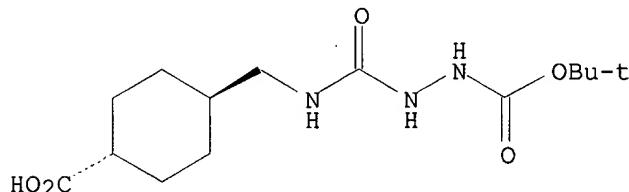


RN 139976-27-5 HCPLUS

CN Hydrazinecarboxylic acid,

2-[[[(trans-4-carboxycyclohexyl)methyl]amino]carbonyl-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

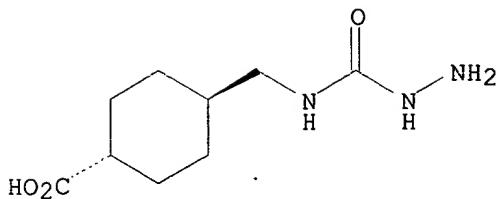
Relative stereochemistry.



RN 139976-28-6 HCPLUS

CN Cyclohexanecarboxylic acid, 4-[[{(hydrazinocarbonyl)amino}methyl]-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 139976-30-0P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as linker group for **solid phase peptide aldehyde synthesis**)

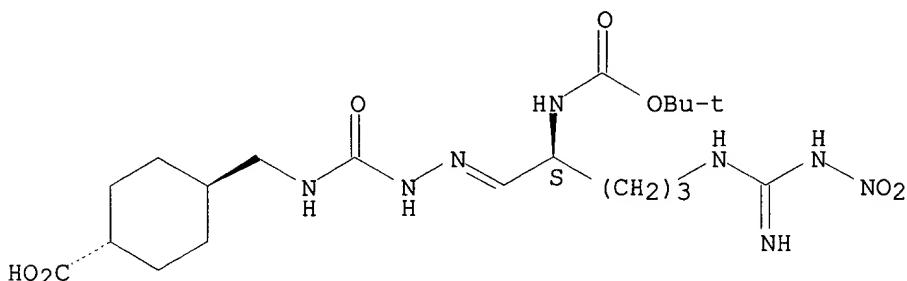
RN 139976-30-0 HCPLUS

CN Cyclohexanecarboxylic acid,

4-[(7S)-7-[3-[[imino(nitroamino)methyl]amino]propyl]-11,11-dimethyl-3,9-dioxo-10-oxa-2,4,5,8-tetraazadodec-5-en-1-yl]-, trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



IT 157633-74-4DP, methylbenzhydrylamine resin-bound

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, for **solid phase synthesis of peptide aldehydes**)

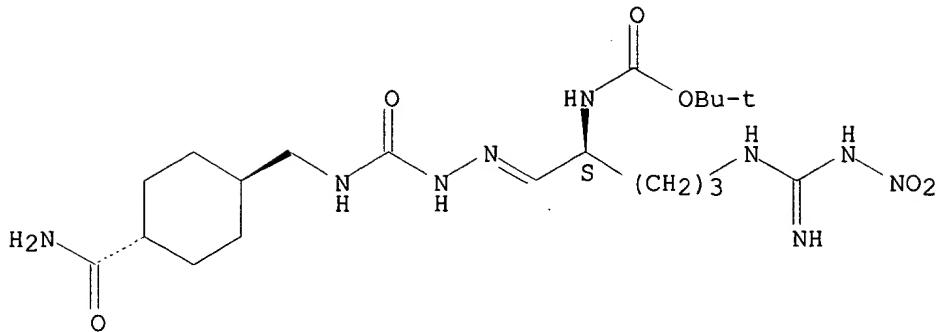
RN 157633-74-4 HCPLUS

CN Carbamic acid,

[1-[[[[[4-(aminocarbonyl)cyclohexyl]methyl]amino]carbonyl]hydrazono]methyl]-4-[[imino(nitroamino)methyl]amino]butyl]-, 1,1-dimethylethyl ester, [1(S)-trans]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



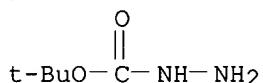
IT 870-46-2, tert-Butyl carbamate 2188-18-3,
BOC-Arg(NO₂)-OH

RL: RCT (Reactant)

(reaction of, in prepn. of linker for **solid phase**
synthesis of peptide aldehydes)

RN 870-46-2 HCPLUS

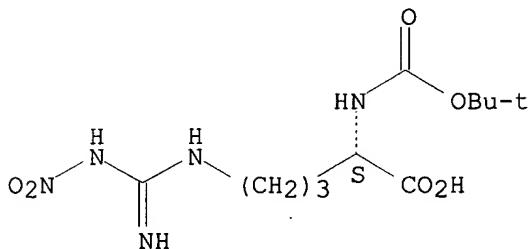
CN Hydrazinecarboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



RN 2188-18-3 HCPLUS

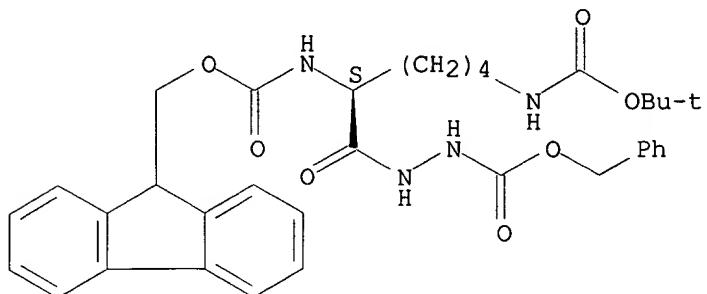
CN L-Ornithine, N²-[(1,1-dimethylethoxy)carbonyl]-N⁵-
[imino(nitroamino)methyl]-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



[[(9H-fluoren-9-ylmethoxy)carbonyl]amino]-1-oxohexyl-, phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

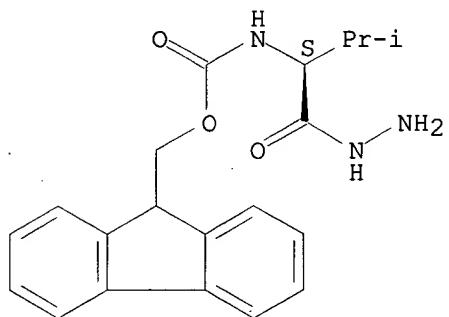
Absolute stereochemistry.



RN 154130-36-6 HCPLUS

CN L-Valine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, hydrazide (9CI) (CA INDEX NAME)

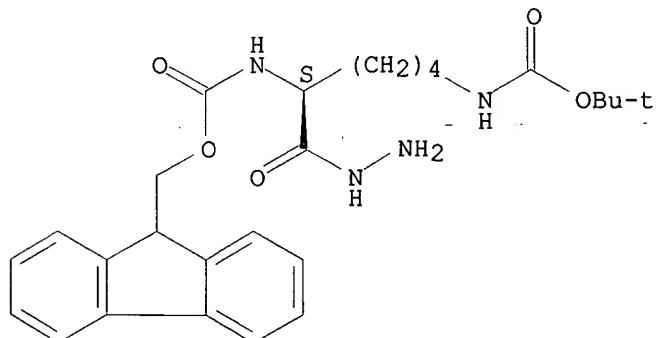
Absolute stereochemistry.



RN 154130-37-7 HCPLUS

CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



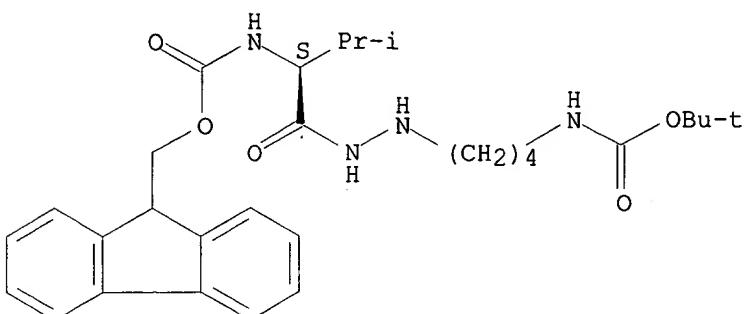
IT 154130-39-9P 154130-41-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as protected azadipeptide building block for solid
 -phase peptide synthesis)

RN 154130-39-9 HCPLUS

CN 13-Oxa-2,5,6,11-tetraazapentadecanoic acid, 14,14-dimethyl-3-(1-methylethyl)-4,12-dioxo-, 9H-fluoren-9-ylmethyl ester, (S)- (9CI) (CA INDEX NAME)

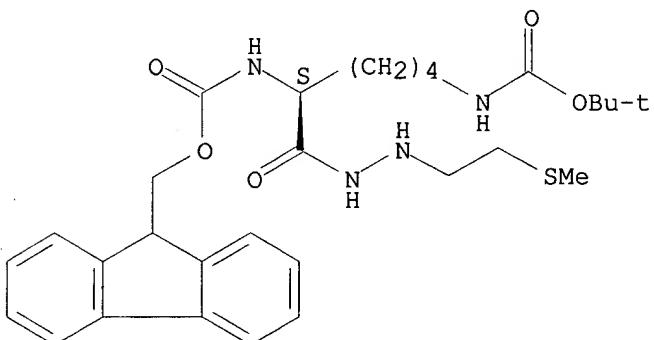
Absolute stereochemistry.



RN 154130-41-3 HCPLUS

CN L-Lysine, N6-[(1,1-dimethylethoxy)carbonyl]-N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-, 2-[2-(methylthio)ethyl]hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

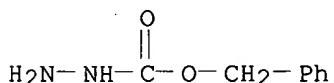


IT 5331-43-1, Benzyl carbazole

RL: RCT (Reactant)
 (reactant, in prepn. of protected azadipeptide building blocks for solid-phase peptide synthesis)

RN 5331-43-1 HCPLUS

CN Hydrazinecarboxylic acid, phenylmethyl ester (9CI) (CA INDEX NAME)



McCarthy

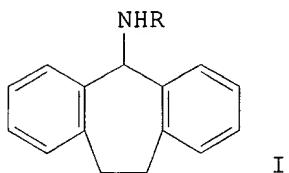
09/122576

Page 47

Searched by John Dantzman 308-4488

=> d bib abs hitstr 32

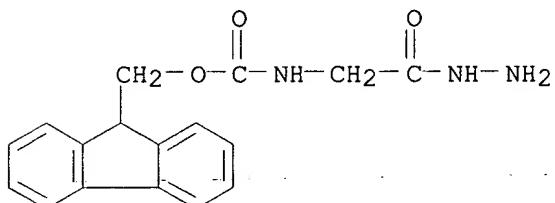
L23 ANSWER 32 OF 52 HCPLUS COPYRIGHT 1999 ACS
 AN 1994:218492 HCPLUS
 DN 120:218492
 TI Design of a versatile linker for solid phase peptide synthesis: synthesis
 of C-terminal primary/secondary amides and hydrazides
 AU Ramage, R.; Irving, S. L.; McInnes, C.
 CS Dep. Chem., Univ. Edinburgh, Edinburgh, EH9 3JJ, UK
 SO Tetrahedron Lett. (1993), 34(41), 6599-602
 CODEN: TELEAY; ISSN: 0040-4039
 DT Journal
 LA English
 GI



AB An efficient, versatile linker for solid-phase peptide synthesis, based upon the dibenzocyclohepta-1,4-diene system, has been developed for the synthesis of C-terminal primary/secondary amides and hydrazides. Thus, linkers I [R = Fmoc, NHBoc, (CH₂)₆Me] were prep'd. and used in the solid-phase synthesis of the above peptides.

IT **83345-59-9P**
 RL: FORM (Formation, nonpreparative); PREP (Preparation)
 (formation of, by release from loaded linker-**resin**)

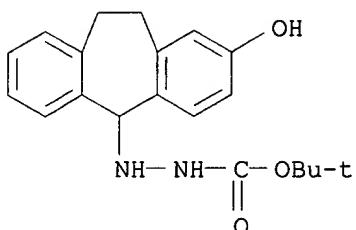
RN 83345-59-9 HCPLUS
 CN Glycine, N-[(9H-fluoren-9-ylmethoxy)carbonyl]-, hydrazide (9CI) (CA
 INDEX
 NAME)



IT **153645-46-6DP**, polystyrene-bound
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as linker for **solid-phase**
synthesis of peptide amides)
 RN 153645-46-6 HCPLUS
 CN Hydrazinecarboxylic acid, 2-(10,11-dihydro-2-hydroxy-5H-

Searched by John Dantzman 308-4488

dibenzo[a,d]cyclohepten-5-yl)-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



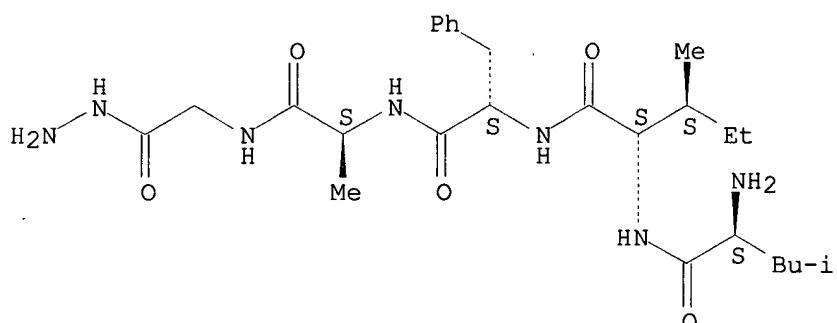
IT 153960-71-5P 153960-72-6P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by solid-phase method using versatile
dibenzocycloheptadiene-based linker)

RN 153960-71-5 HCPLUS

CN Glycine, N-[N-[N-(N-L-leucyl-L-isoleucyl)-L-phenylalanyl]-L-alanyl]-,
hydrazide (9CI) (CA INDEX NAME)

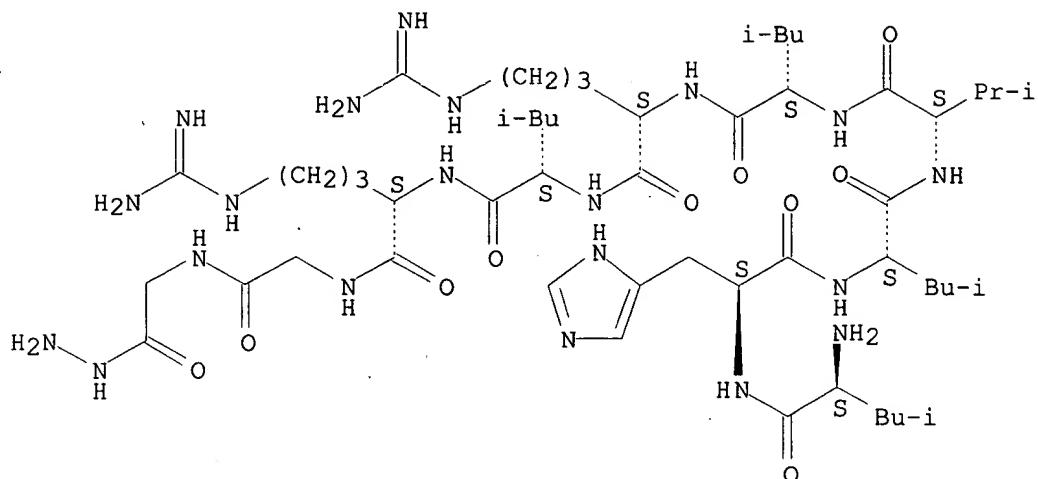
Absolute stereochemistry.



RN 153960-72-6 HCPLUS

CN Glycine, N-[N-[N2-[N-[N-[N-(N-L-leucyl-L-histidyl)-L-leucyl]-L-
valyl]-L-leucyl]-L-arginyl]-L-leucyl]-L-arginyl]glycyl]-, hydrazide (9CI)
(CA INDEX NAME)

Absolute stereochemistry.



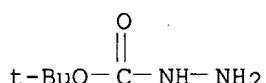
IT 870-46-2

RL: RCT (Reactant)

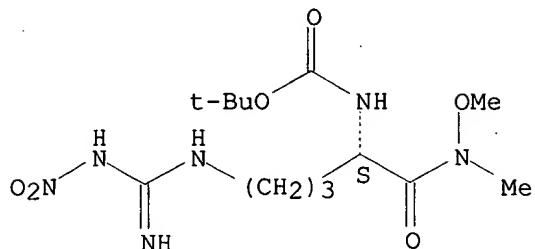
(reactant, in prepn. of versatile dibenzocycloheptadiene-based linker
for solid-phase peptide synthesis)

RN 870-46-2 HCPLUS

CN Hydrazinecarboxylic acid, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



Absolute stereochemistry.



IT 139976-26-4P 139976-27-5P 139976-29-7P
139976-30-0P

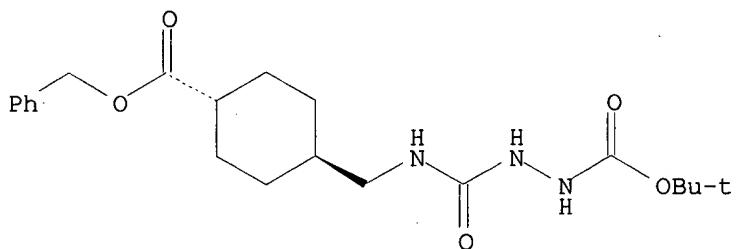
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, as intermediate for semicarbazone/semicarbazide amino acid aldehyde support for automated synthesis of peptide analogs)

RN 139976-26-4 HCPLUS

CN Hydrazinecarboxylic acid,

2-[[[trans-4-[(phenylmethoxy)carbonyl]cyclohexyl]methyl]amino]carbonyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.

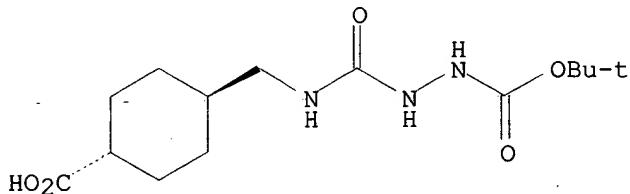


RN 139976-27-5 HCPLUS

CN Hydrazinecarboxylic acid,

2-[[[(trans-4-carboxycyclohexyl)methyl]amino]carbonyl-, 1-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

Relative stereochemistry.



RN 139976-29-7 HCPLUS

CN Cyclohexanecarboxylic acid, 4-[[hydrazinocarbonyl]amino]methyl-, trans-,

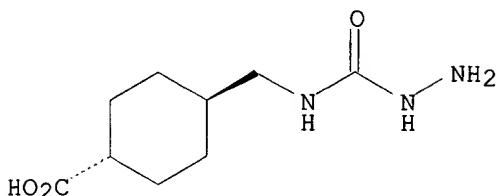
mono(trifluoroacetate) (9CI) (CA INDEX NAME)

Searched by John Dantzman 308-4488

CM 1

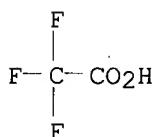
CRN 139976-28-6
 CMF C9 H17 N3 O3
 CDES 2:TRANS

Relative stereochemistry.



CM 2

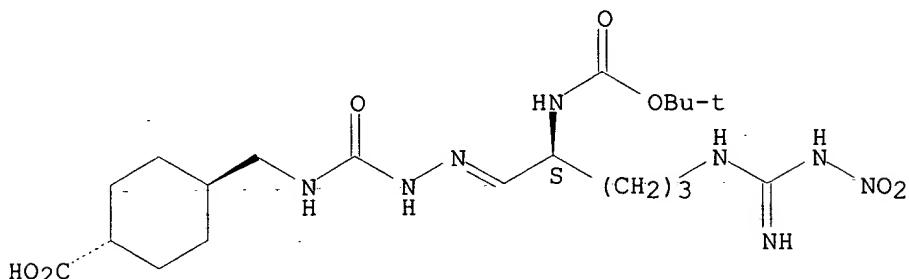
CRN 76-05-1
 CMF C2 H F3 O2



RN 139976-30-0 HCPLUS
 CN Cyclohexanecarboxylic acid,
 4-[(7S)-7-[3-[[imino(nitroamino)methyl]amino]propyl]-11,11-dimethyl-3,9-dioxo-10-oxa-2,4,5,8-tetraazadodec-5-en-1-yl]-,
 trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



IT 139976-30-0DP, resin bound

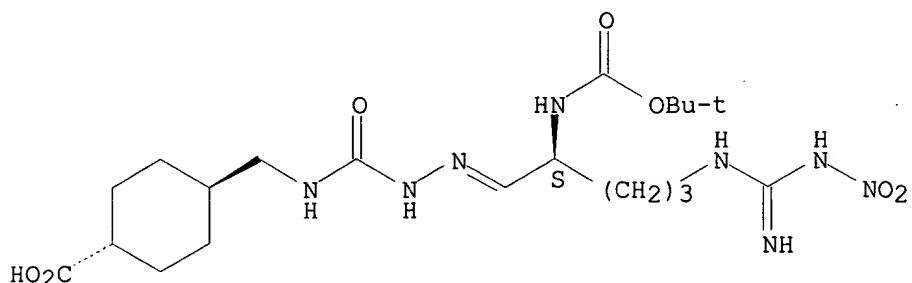
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as support for automated synthesis of peptide analogs)

RN 139976-30-0 HCPLUS

Searched by John Dantzman 308-4488

CN Cyclohexanecarboxylic acid,
 4-[*(7S*)-7-[3-[[imino(nitroamino)methyl]amino]propyl]-11,11-dimethyl-3,9-dioxo-10-oxa-2,4,5,8-tetraazadodec-5-en-1-yl]-,
 trans- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
 Double bond geometry unknown.



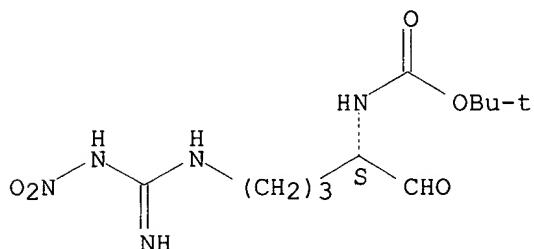
IT 71413-14-4P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, in **solid phase synthesis** of
 peptide aldehydes)

RN 71413-14-4 HCPLUS

CN Carbamic acid, [*(1S*)-1-formyl-4-[[imino(nitroamino)methyl]amino]butyl]-,
 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



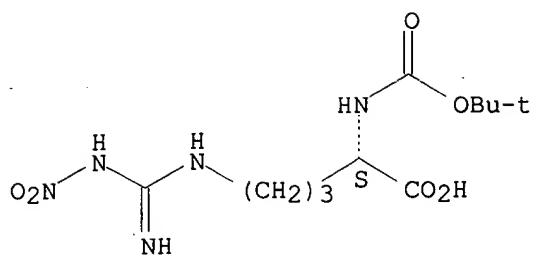
IT 2188-18-3

RL: RCT (Reactant)
 (redn. of, in **solid phase synthesis** of
 peptide aldehydes)

RN 2188-18-3 HCPLUS

CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-
 [imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

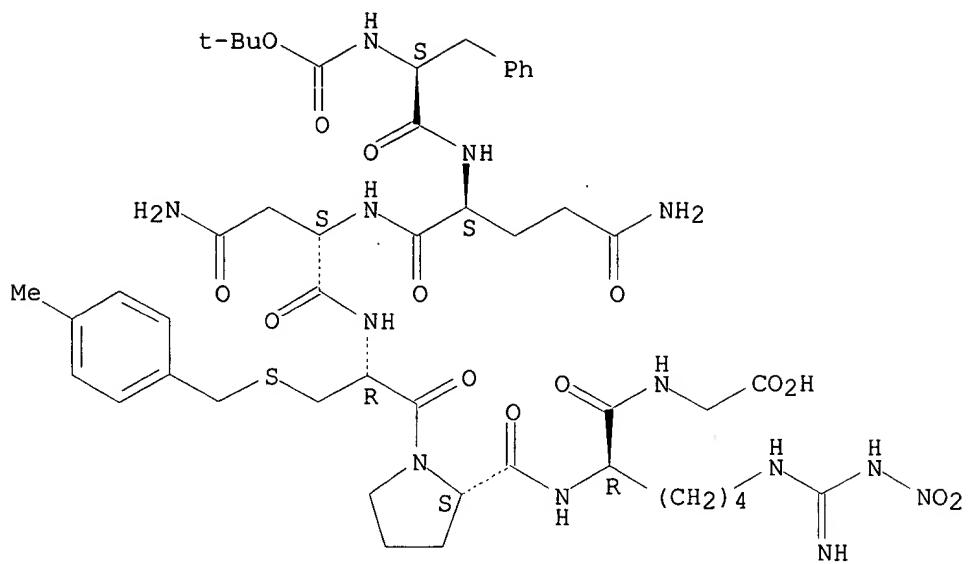
Absolute stereochemistry.



=> d bib abs hitstr 34

L23 ANSWER 34 OF 52 HCAPLUS COPYRIGHT 1999 ACS
AN 1992:531545 HCAPLUS
DN 117:131545
TI Amino acids and peptides. CCXXVIII. The analogs of 8-D-homoarginin-
vasopressin with o-substituted phenylalanine in position 2: synthesis
and
some biological properties
AU Zertova, Miroslava; Prochazka, Zdenko; Slaninova, Jirina; Barth,
Tomislav;
Majer, Pavel; Lebl, Michal
CS Inst. Org. Chem. Biochem., Czech. Acad. Sci., Prague, 166 10, Czech.
SO Collect. Czech. Chem. Commun. (1992), 57(5), 1103-10
CODEN: CCCCCAK; ISSN: 0010-0765
DT Journal
LA English
OS CASREACT 117:131545
GI For diagram(s), see printed CA Issue.
AB Solid-phase methodol. on p-methylbenzhydrylamine **resin** was used
for the synthesis of four title vasopressin analogs I [Har =
homoarginine;
X = L-Phe(o-Me), D-Phe(o-Me), L-Phe(o-Et), D-Phe(o-Et)] with the noncoded
amino acids D-homoarginine in position 8 and o-substituted L- or
D-phenylalanine in position 2. All analogs had very low antidiuretic
activity. Analogs I [X = L-Phe(o-Me), D-Phe(o-Et)] were low pressor
inhibitors. All analogs were found to be the uterotonic inhibitors, the
most potent one in vitro being [D-Phe(o-Et)2,D-Har8]vasopressin with a
pA2
= 8.4.
IT 132718-72-0DP, amide with methylbenzhydrylamine **resin**
RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. and **solid-phase synthesis** of
vasopressin analogs with)
RN 132718-72-0 HCAPLUS
CN Glycine, N-[N2-[1-[N-[N2-[N-[(1,1-dimethylethoxy)carbonyl]-L-
phenylalanyl]-L-glutaminyl]-L-asparaginyl]-S-[(4-methylphenyl)methyl]-L-
cysteinyl]-L-prolyl]-N6-[imino(nitroamino)methyl]-D-lysyl]- (9CI) (CA
INDEX NAME)

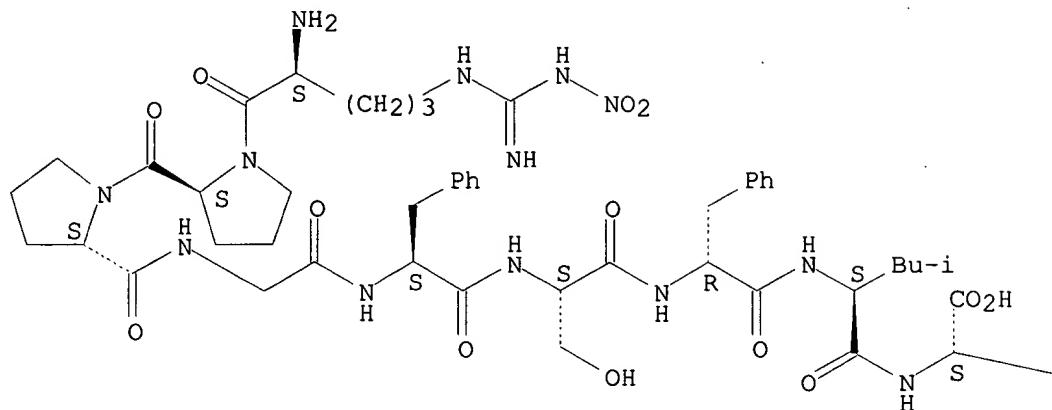
Absolute stereochemistry.



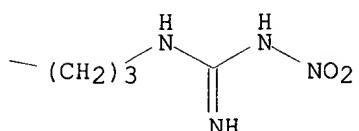
=> d bib abs hitstr 35

L23 ANSWER 35 OF 52 HCAPLUS COPYRIGHT 1999 ACS
AN 1992:408430 HCAPLUS
DN 117:8430
TI Synthesis of bradykinin analogs by new reaction vessel
AU Choi, Cheong
CS Coll. Agric. Anim. Sci., Yeungnam Univ., Gyongsan, 712-749, S. Korea
SO Han'guk Nonghwa Hakhoechi (1991), 34(4), 334-8
CODEN: JKACA7; ISSN: 0368-2897
DT Journal
LA Korean
AB Synthesis of (D-Phe₇,Leu₈)-bradykinin and bradykinin by solid-phase method
using a new reaction vessel was carried out. Coupling was performed by dicyclohexylcarbodiimide. After cleavage with dried HBr the peptides were purified by high-pressure liq. chromatog. Their purify was assayed by paper and thin layer chromatog., m.p. and amino acid anal.
(D-Phe₇,Leu₈)-bradykinin and bradykinin were incubator in vitro endopeptidase (.alpha.-chymotrypsin) and exopeptidase(carboxypeptidase A, leucine aminopeptidase) in order to study the degrdn. pattern of peptides.
(D-Phe₇,Leu₈)-bradykinin and bradykinin were rapidly degraded by .alpha.-chymotrypsin and carboxypeptidase A. (D-Phe₇,Leu₈)-bradykinin and bradykinin contain imino peptide bound from proline at N-terminal and therefore they were not attacked by leucine aminopeptidase.
IT 141873-51-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenolysis of)
RN 141873-51-0 HCAPLUS
CN Bradykinin,
1-[N5-[imino(nitroamino)methyl]-L-ornithine]-7-D-phenylalanine-
8-L-leucine-9-[N5-[imino(nitroamino)methyl]-L-ornithine]- (9CI) (CA
INDEX
NAME)
Absolute stereochemistry.

PAGE 1-A

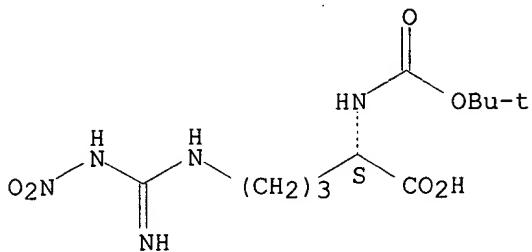


PAGE 1-B



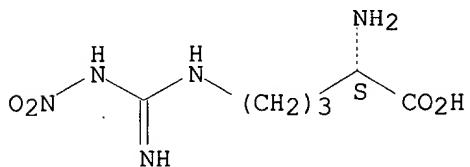
IT 2188-18-3DP, resin-bound
RL: SPN (Synthetic preparation); PREP (Preparation)
(prep. and partial deblocking of)
RN 2188-18-3 HCPLUS
CN L-Ornithine, N2-[(1,1-dimethylethoxy)carbonyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 2149-70-4DP, NG-Nitro-L-arginine, **resin-bound**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and peptide coupling of, with leucine deriv.)
 RN 2149-70-4 HCPLUS
 CN L-Ornithine, N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

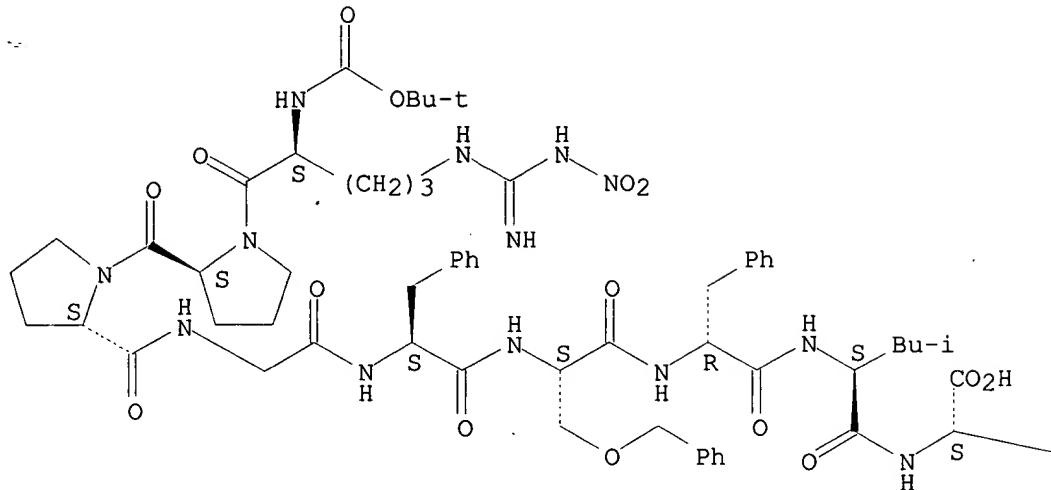
Absolute stereochemistry.



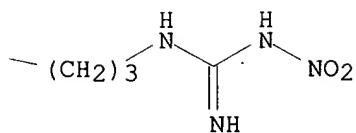
IT 141873-50-9DP, **resin-bound**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and **resin** cleavage-deblocking of)
 RN 141873-50-9 HCPLUS
 CN L-Ornithine,
 N2-[N-[N-[N-[N-[1-[1-[N2-[(1,1-dimethylethoxy)carbonyl]-N5-
 [imino(nitroamino)methyl]-L-ornithyl]-L-prolyl]-L-prolyl]glycyl]-L-
 phenylalanyl]-O-(phenylmethyl)-L-seryl]-D-phenylalanyl]-L-leucyl]-N5-
 [imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



IT 87590-39-4DP, resin-bound

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prep. and solid-phase synthesis of
 bradykinin analog with)

RN 87590-39-4 HCPLUS

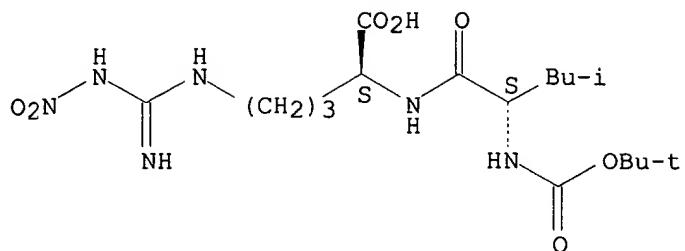
CN L-Ornithine, N2-[N-[(1,1-dimethylethoxy)carbonyl]-L-leucyl]-N5-[imino(nitroamino)methyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

McCarthy

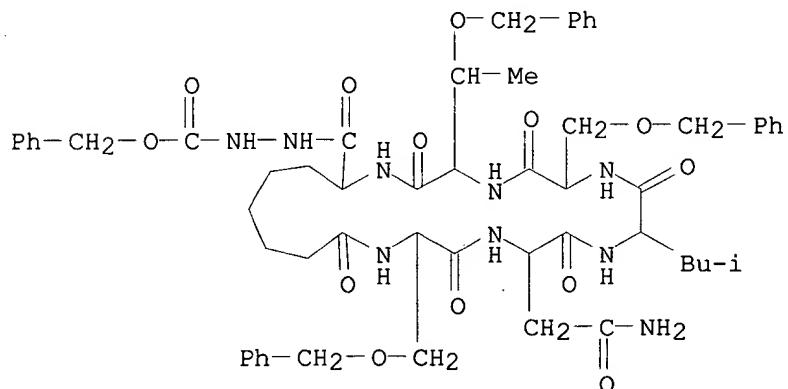
09/122576

Page 62



=> d bib abs hitstr 36

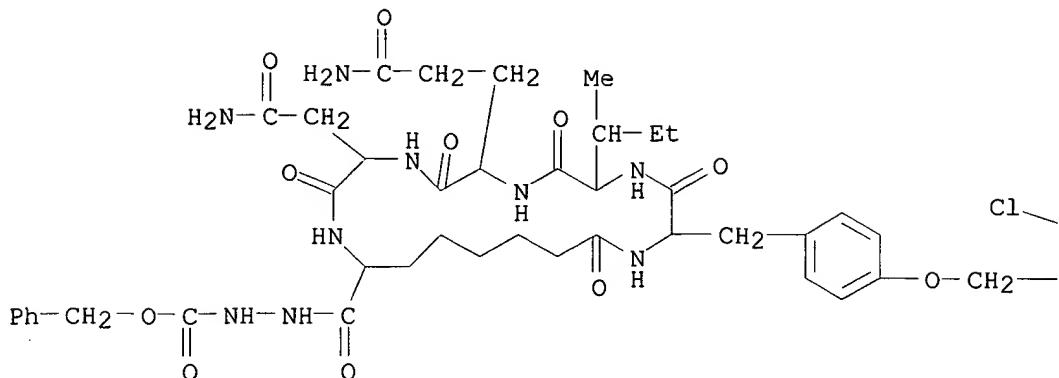
L23 ANSWER 36 OF 52 HCAPLUS COPYRIGHT 1999 ACS
 AN 1992:194832 HCAPLUS
 DN 116:194832
 TI Facile synthesis of cyclic peptides containing .alpha.-aminosuberic acid with oxime resin
 AU Nishino, Norikazu; Xu, Ming; Mihara, Hisakazu; Fujimoto, Tsutomu; Ohba, Masataka; Ueno, Yukio; Kumagai, Hiromichi
 CS Fac. Eng., Kyushu Inst. Technol., Kitakyushu, 804, Japan
 SO J. Chem. Soc., Chem. Commun. (1992), (2), 180-1
 CODEN: JCCCAT; ISSN: 0022-4936
 DT Journal
 LA English
 GI For diagram(s), see printed CA Issue.
 AB Title cyclic peptides, e.g., I, were prep'd. by the solid-phase method usuing an oxime resin. The protected peptide was cyclized when it was cleaved from the oxime resin by Et₃N/HOAc.
 IT 139903-97-2P 139903-99-4P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and deblocking of)
 RN 139903-97-2 HCAPLUS
 CN L-Threonine,
 N-[7-amino-1,8-dioxo-8-[2-[(phenylmethoxy)carbonyl]hydrazino]octyl]-O-(phenylmethyl)-L-seryl-L-asparaginyl-L-leucyl-O-(phenylmethyl)-L-seryl-O-(phenylmethyl)-, cyclic (5.fwdarw.1)-peptide, (S)- (9CI) (CA INDEX NAME)



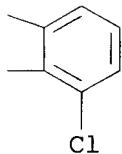
RN 139903-99-4 HCAPLUS
 CN L-Asparagine,
 N-[7-amino-1,8-dioxo-8-[2-[(phenylmethoxy)carbonyl]hydrazino]

]octyl]-O-[(2,6-dichlorophenyl)methyl]-L-tyrosyl-L-isoleucyl-L-glutaminyl-, cyclic (4.fwdarw.1)-peptide, (S)- (9CI) (CA INDEX NAME)

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PAGE 1-B



IT 139903-96-1DP, resin bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prep. and resin cleavage-cyclization of)

RN 139903-96-1 HCAPLUS

CN L-Threoninamide, O-(phenylmethyl)-L-seryl-L-asparaginyl-L-leucyl-O-

(phenylmethyl)-L-seryl-N-[7-[[[(4-nitrophenyl)phenylmethylen]amino]oxy]-7-oxo-1-[2-[(phenylmethoxy)carbonyl]hydrazino]carbonylheptyl]-O-(phenylmethyl)-, (S)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

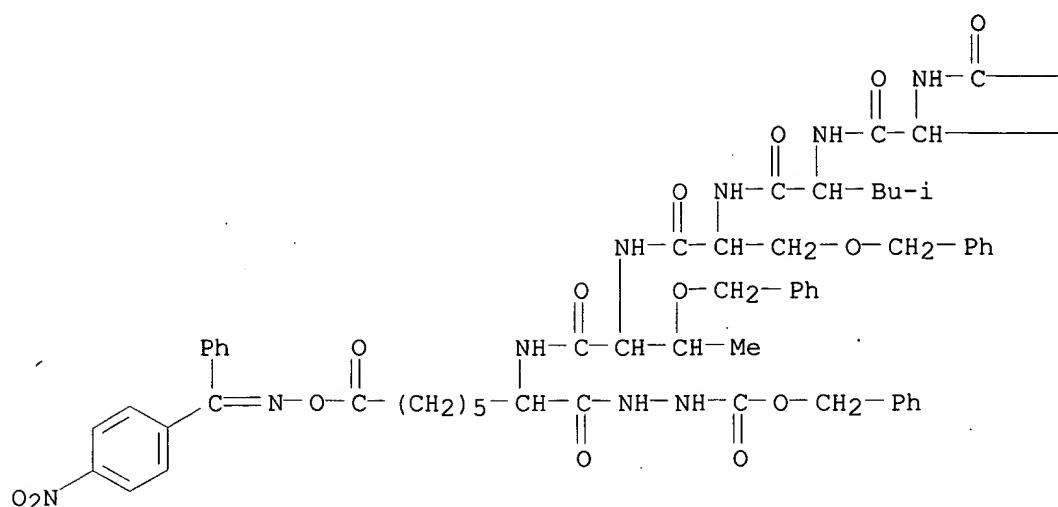
CM 1

CRN 139903-95-

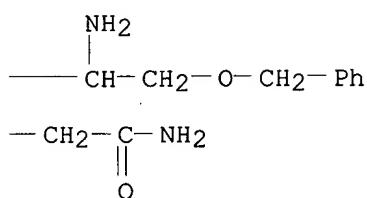
CMF C70 H83 N11 O16

CDES *

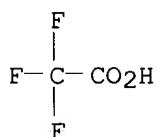
PAGE 1-A



PAGE 1-B



CM 2

CRN 76-05-1
CMF C2 H F3 O2

IT 139903-94-9DP, **resin-bound**
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prep. and **solid-phase** peptide **synthesis**
 with)

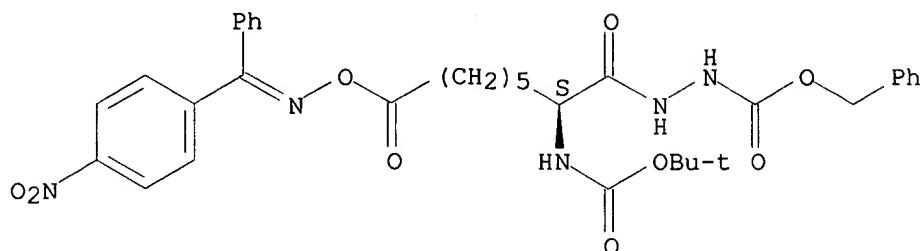
RN 139903-94-9 HCPLUS

CN Hydrazinecarboxylic acid, 2-[2-[[[(1,1-dimethylethoxy)carbonyl]amino]-8-
 [[[4-nitrophenyl]phenylmethylene]amino]oxy]-1,8-dioxooctyl]-,
 Searched by John Dantzman 308-4488

phenylmethyl ester, (S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.



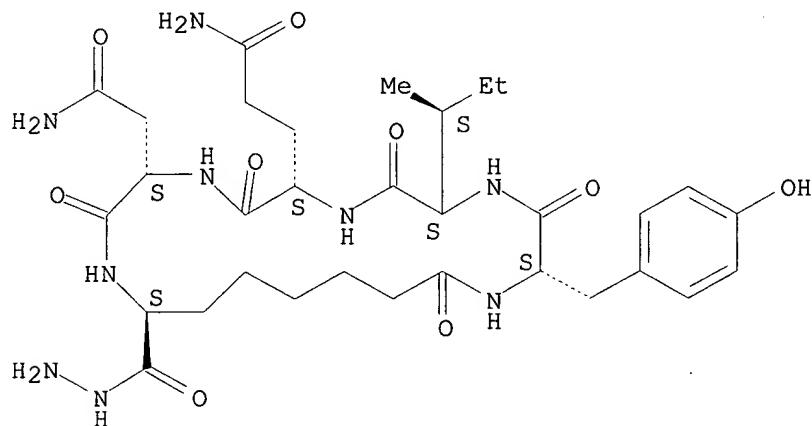
IT 83428-27-7P 139903-98-3P

RL: SPN (Synthetic preparation); PREP (Preparation)
(prepn. of, by solid-phase method on oxime resin)

RN 83428-27-7 HCPLUS

CN 1,6-Dicarbaoxytocin, 1-butanoic acid-7-de-L-proline-8-de-L-leucine-9-deglycinamide-, hydrazide (9CI) (CA INDEX NAME)

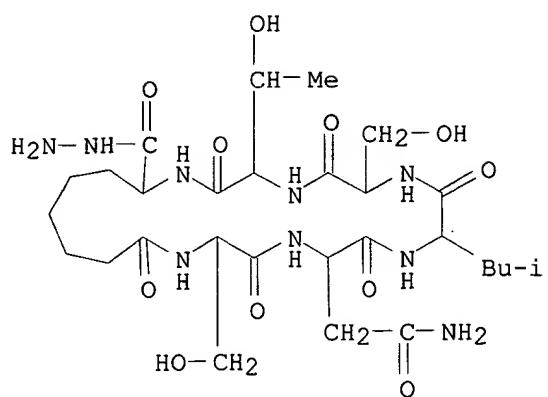
Absolute stereochemistry.



RN 139903-98-3 HCPLUS

CN L-Threonine,

N-(7-amino-8-hydrazino-1,8-dioxooctyl)-L-seryl-L-asparaginyl-L-leucyl-L-seryl-, cyclic (5.fwdarw.1)-peptide, (S)- (9CI) (CA INDEX NAME)



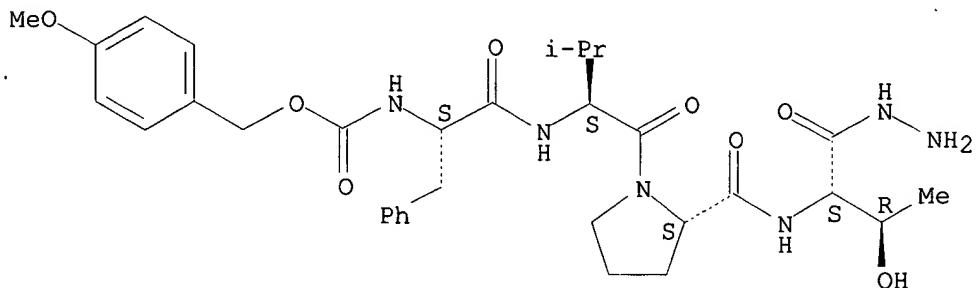
103607-33-6P 107009-69-8P 108442-03-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as intermediate for **solid-phase synthesis** of calcitonin related peptide derivs.)

RN 98748-34-6 HCPLUS

CN L-Threonine, N-[1-[N-[N-[(4-methoxyphenyl)methoxy]carbonyl]-L-phenylalanyl]-L-valyl]-L-prolyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

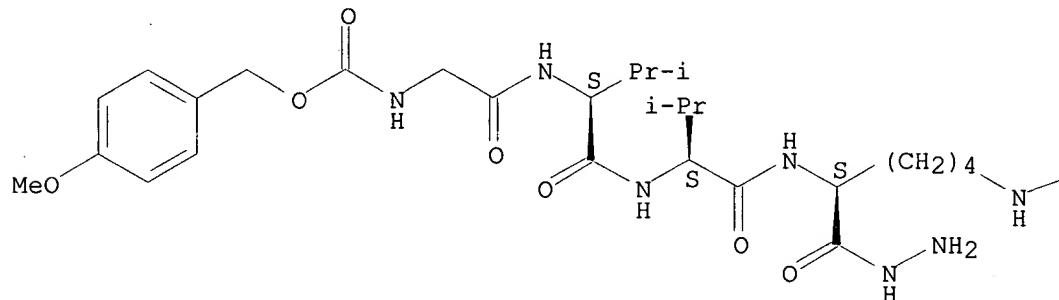


RN 98748-38-0 HCPLUS

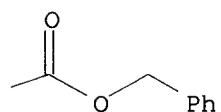
CN L-Lysine,
 N2-[N-[N-[N-[(4-methoxyphenyl)methoxy]carbonyl]glycyl]-L-valyl]-
 L-valyl]-N6-[(phenylmethoxy)carbonyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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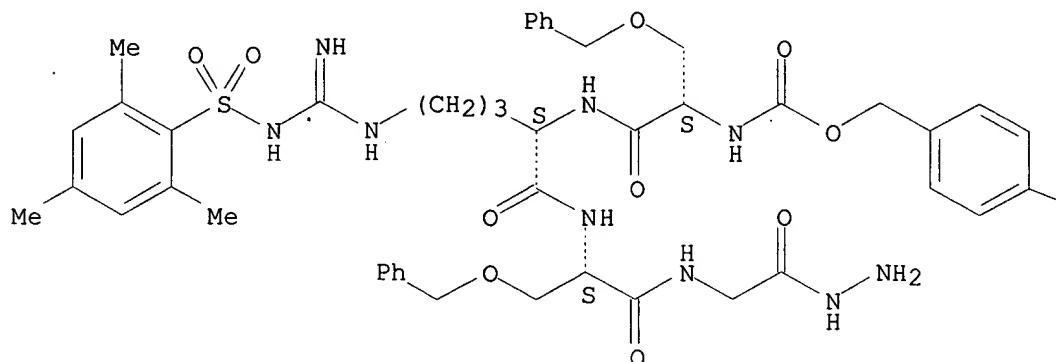
RN 98748-40-4 HCPLUS

CN Glycine,
 N-[N5-[imino[[(2,6-dimethylphenyl)phenoxy]methyl]-N2-

[N-[(4-methoxyphenyl)methoxy]carbonyl]-O-(phenylmethyl)-L-seryl]-L-ornithyl]-O-(phenylmethyl)-L-seryl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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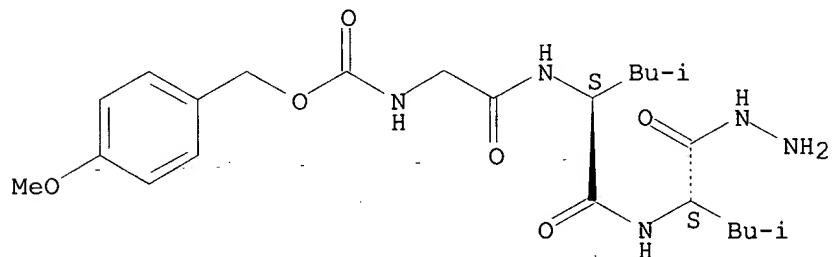
OMe

RN 98748-41-5 HCPLUS

CN L-Leucine,

N-[N-[N-[(4-methoxyphenyl)methoxy]carbonyl]glycyl]-L-leucyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 98748-42-6 HCPLUS

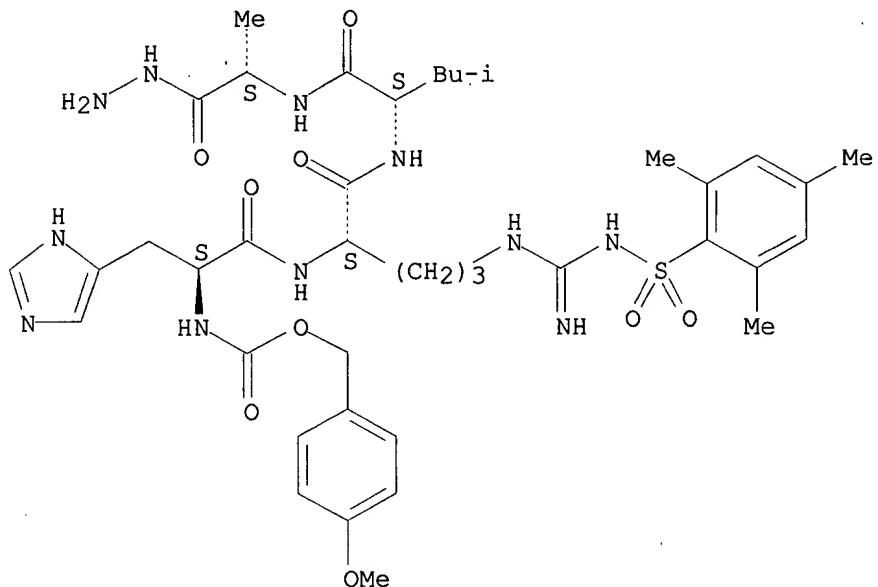
CN L-Alanine,

N-[N-[N5-[imino[(2,4,6-trimethylphenyl)sulfonyl]amino]methyl]-N2-[(4-methoxyphenyl)methoxy]carbonyl]-L-histidyl]-L-ornithyl]-L-

Searched by John Dantzman 308-4488

leucyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

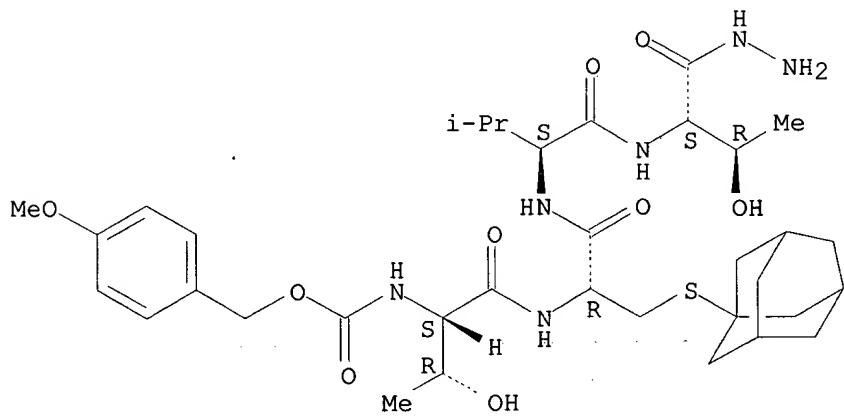


RN 98748-43-7 HCAPLUS

CN L-Threonine,

N-[N-[N-[N-[(4-methoxyphenyl)methoxy]carbonyl]-L-threonyl]-S-tricyclo[3.3.1.13,7]dec-1-yl-L-cysteinyl]-L-valyl], hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

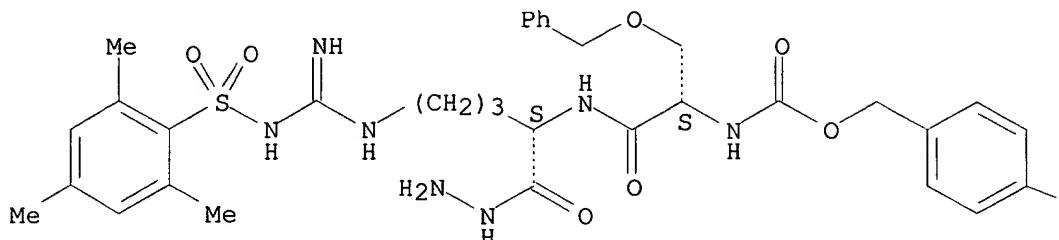


RN 103607-33-6 HCAPLUS

CN L-Ornithine, N5-[imino[[[(2,4,6-trimethylphenyl)sulfonyl]amino)methyl]-N2-[N-[(4-methoxyphenyl)methoxy]carbonyl]-O-(phenylmethyl)-L-seryl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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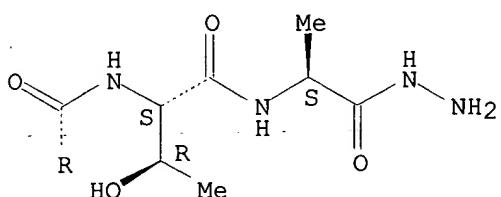
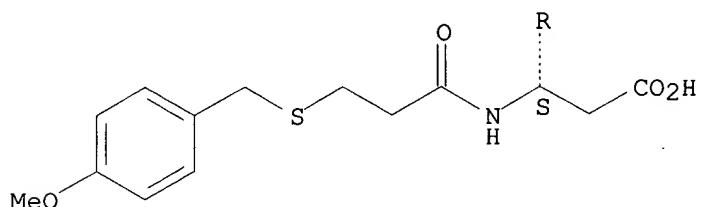
PAGE 1-B

OMe

RN 107009-69-8 HCPLUS

CN L-Alanine, N-[N-[N-[3-[(4-methoxyphenyl)methyl]thio]-1-oxopropyl]-L-.alpha.-aspartyl]-L-threonyl-, 1-hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



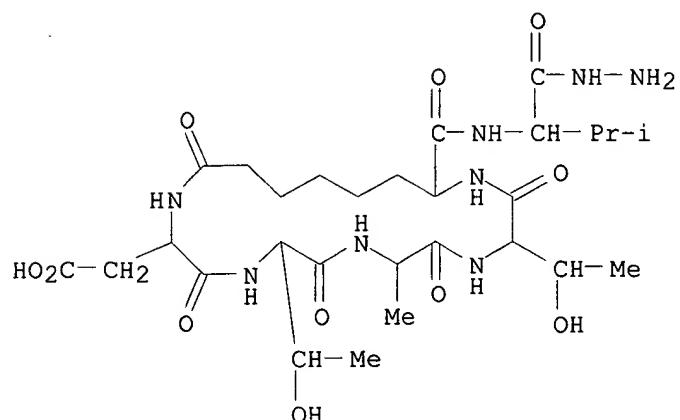
RN 108442-03-1 HCPLUS

CN L-Valine,

L-.alpha.-aspartyl-L-threonyl-L-alanyl-L-threonyl-7-carboxy-L-2-aminoheptanoyl-, 6-hydrazide, cyclic (5.fwdarw.1)-peptide (9CI) (CA INDEX)

Searched by John Dantzman 308-4488

NAME)

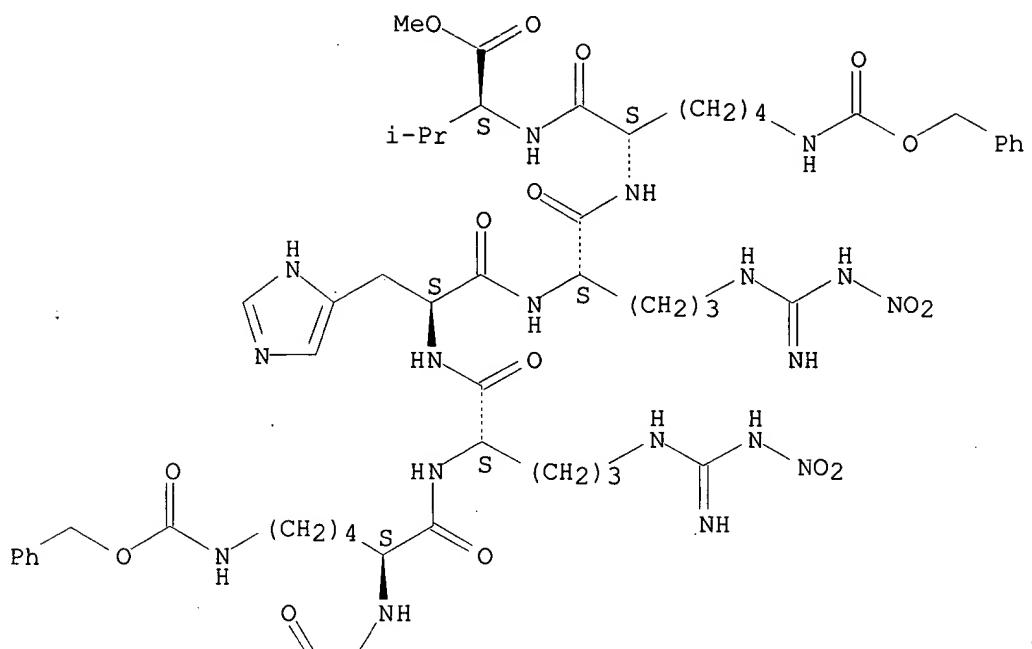


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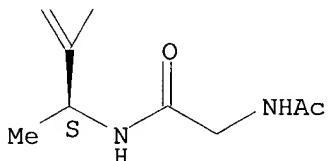
L23 ANSWER 38 OF 52 HCAPLUS COPYRIGHT 1999 ACS
AN 1986:553514 HCAPLUS
DN 105:153514
TI Solid-phase synthesis using a new polyacrylic **resin**. Synthesis
of the fragment 14-21 of the amino acid sequence of histone H4
AU Calas, Bernard; Mery, Jean; Parello, Joseph; Cave, Adrien
CS Lab. Chim. Struct., USTL, Montpellier, 34060, Fr.
SO Tetrahedron (1985), 41(22), 5331-9
CODEN: TETRAB; ISSN: 0040-4020
DT Journal
LA English
OS CASREACT 105:153514
AB Title histone H4 fragment Ac-Gly-Ala-Lys-X-Arg-His-Arg-Lys-Val-OMe (I, X
= null) as well as analog I (X = Leu) were prep'd. by the solid-phase method
on a new polyacrylic **resin** contg. a glycolamide ester linkage as
an anchoring moiety between the **resin** and the peptide. Thus,
the copolymn. of N-acryloylpiperididine with CH₂:CHCONHCH₂CH₂NHCOCH:CH₂
and CH₂:CHCONHCH₂CH₂CO₂Me gave polyacrylic **resin** MeO₂C-**resin**
, which was amidated with H₂NCH₂CH₂NH₂ and then N-acylated with
(BrCH₂CO)₂O to give BrCH₂CONHCH₂CH₂NHCO-**resin**. The latter was
treated with Boc-Val-OCs (Boc = Me₃CO₂C) to give Boc-Val-
OCH₂CONHCH₂CH₂NHCO-**resin**, which was used in the solid-phase
synthesis of I (X = null, Leu). The final protected peptides were
cleaved
from the **resin** by methanolysis to give the corresponding
protected peptide Me esters.
IT 104354-93-0P 104354-94-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and hydrogenolysis of)
RN 104354-93-0 HCAPLUS
CN L-Valine, N-[N2-[N2-[N2-[N-(N-acetylglucyl)-L-alanyl]-N6-
[(phenylmethoxy)carbonyl]-L-lysyl]-N5-[imino(nitroamino)methyl]-L-
ornithyl]-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-
[(phenylmethoxy)carbonyl]-L-lysyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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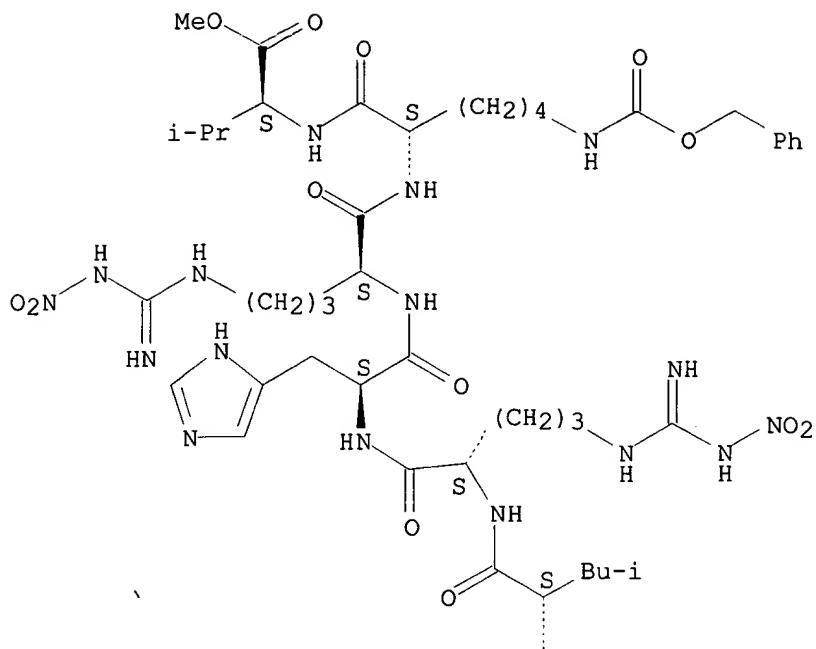
RN 104354-94-1 HCPLUS

CN L-Valine, N-[N2-[N2-[N-[N2-[N-[N-(N-acetylglycyl)-L-alanyl]-N6-

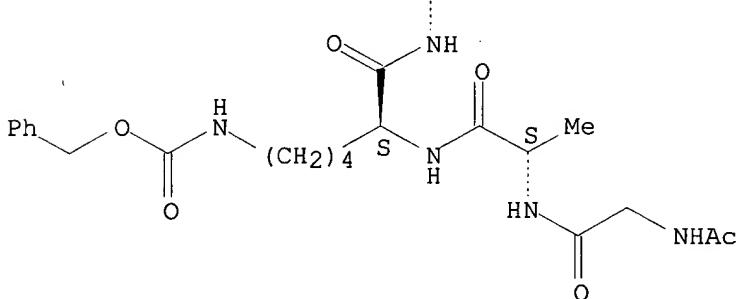
[(phenylmethoxy)carbonyl]-L-lysyl]-L-leucyl]-N5-[imino(nitroamino)methyl]-
L-ornithyl]-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-
[(phenylmethoxy)carbonyl]-L-lysyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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IT 104343-71-7DP, ester with glycolamide bound to polyacrylic resin
 104343-72-8DP, ester with glycolamide bound to polyacrylic resin
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and methanolic resin cleavage of)

RN 104343-71-7 HCPLUS

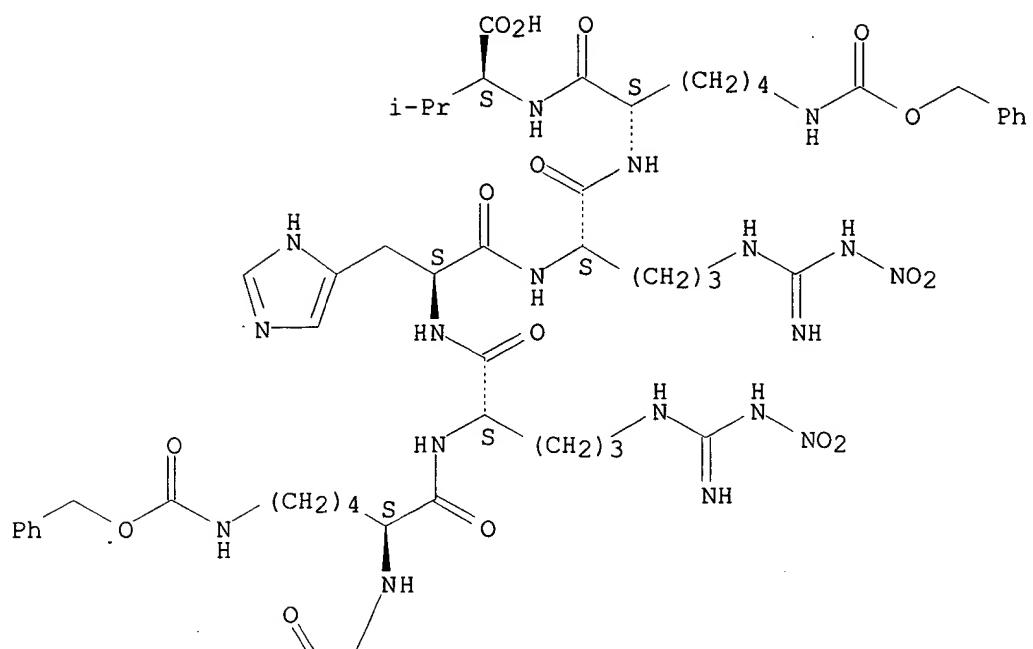
CN L-Valine, N-[N2-[N2-[N2-[N-(N-acetylglycyl)-L-alanyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

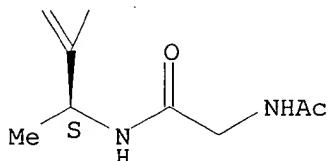
Searched by John Dantzman

308-4488

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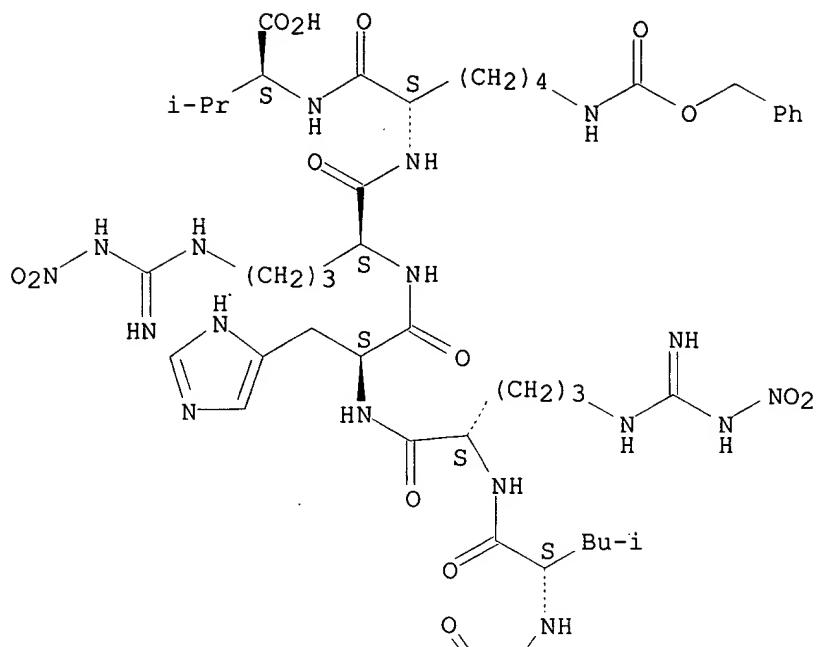
RN 104343-72-8 HCPLUS

CN L-Valine, N-[N2-[N2-[N-[N2-[N-(N-acetylglycyl)-L-alanyl]-N6-

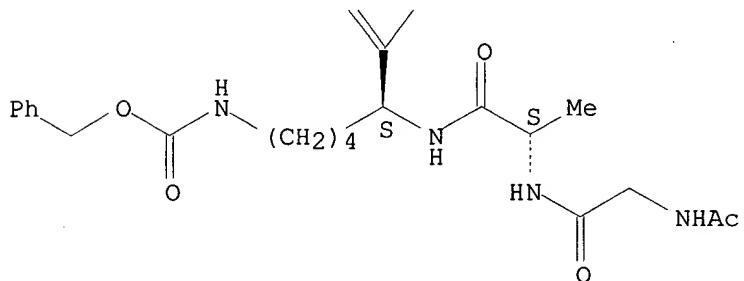
[(phenylmethoxy)carbonyl]-L-lysyl]-L-leucyl]-N5-[imino(nitroamino)methyl]-
 L-ornithyl]-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[
 (phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A



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IT 104343-74-0DP, ester with glycolamide bound to polyacrylic resin
 104343-75-1DP, ester with glycolamide bound to polyacrylic resin

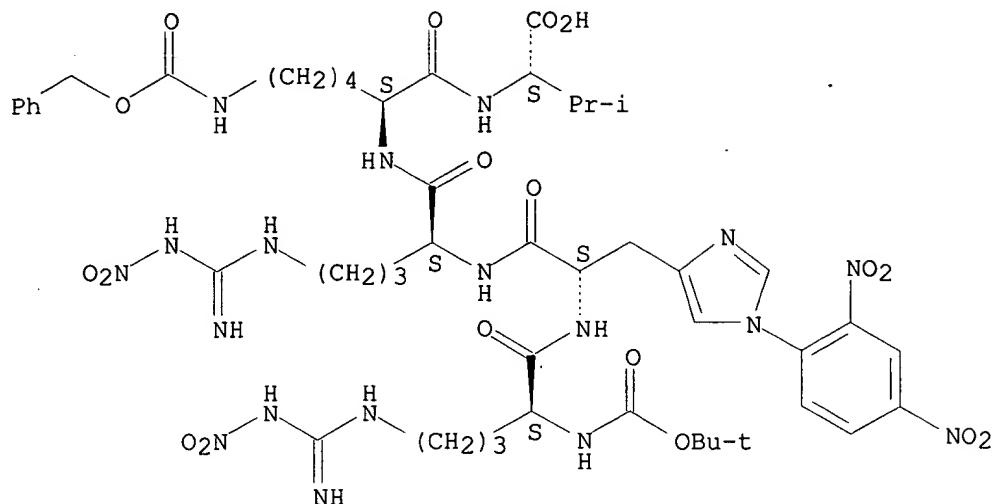
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. and solid-phase peptide synthesis
 with)

RN 104343-74-0 HCPLUS

CN L-Valine, N-[N2-[N2-[N-[(1,1-dimethylethoxy)carbonyl]-L-

[imino(nitroamino)methyl]-L-ornithyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl] - (9CI) (CA INDEX NAME)

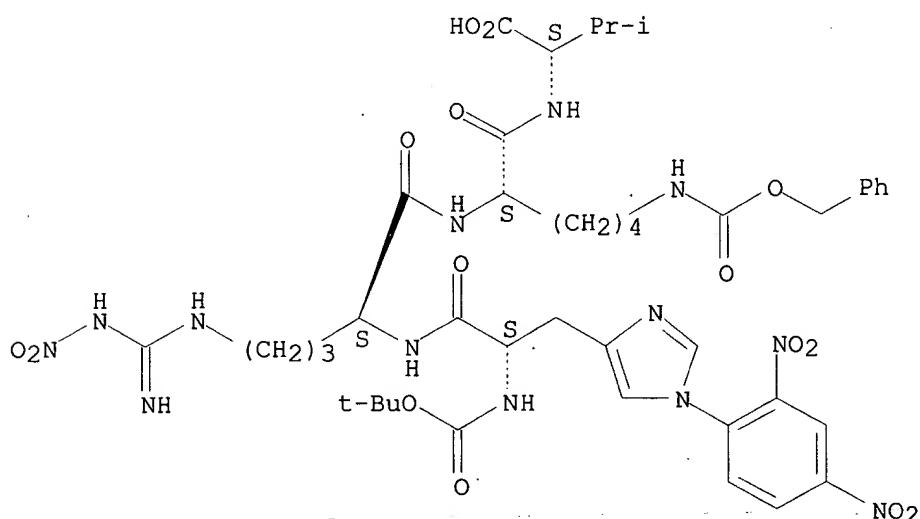
Absolute stereochemistry.



RN 104343-75-1 HCPLUS

CN L-Valine, N-[N2-[N2-[N-[(1,1-dimethylethoxy)carbonyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT 104343-69-3DP, ester with glycolamide bound to polyacrylic resin
resin 104343-70-6DP, ester with glycolamide bound to polyacrylic resin

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
(prepn. and thiolysis of)

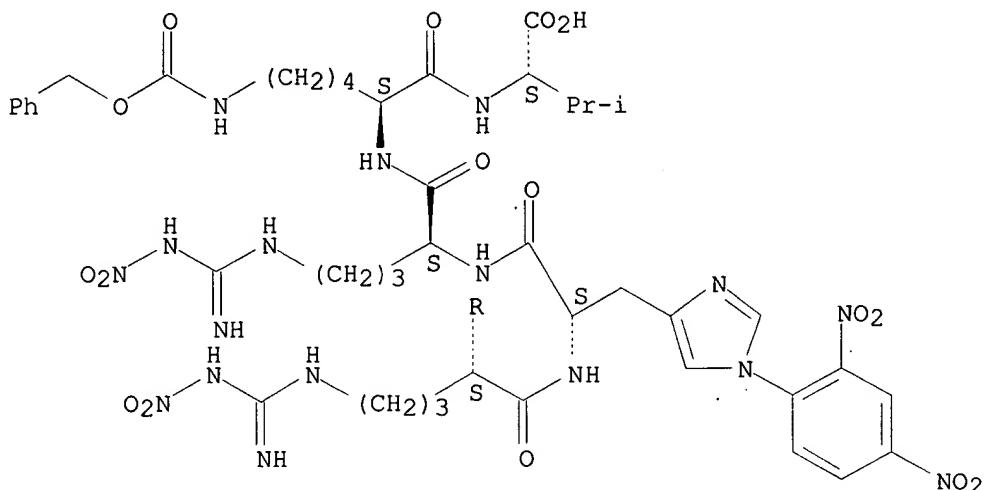
RN 104343-69-3 HCPLUS

CN L-Valine, N-[N2-[N2-[N2-[N-[(N-acetylglycyl)-L-alanyl]-N6-
Searched by John Dantzman 308-4488

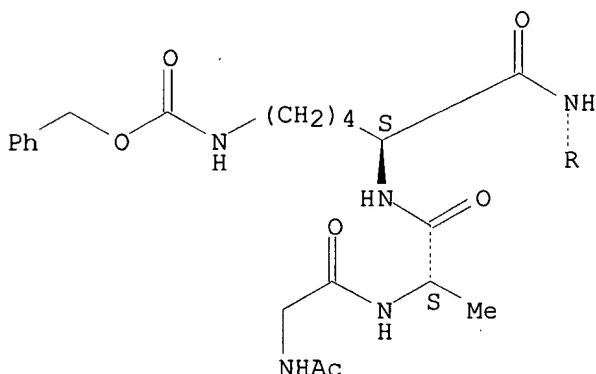
[(phenylmethoxy)carbonyl]-L-lysyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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RN 104343-70-6 HCPLUS

CN L-Valine, N-[N2-[N2-[N-[N2-[N-[N-(N-acetylglycyl)-L-alanyl]-N6-

[(phenylmethoxy)carbonyl]-L-lysyl]-L-leucyl]-N5-[imino(nitroamino)methyl]-

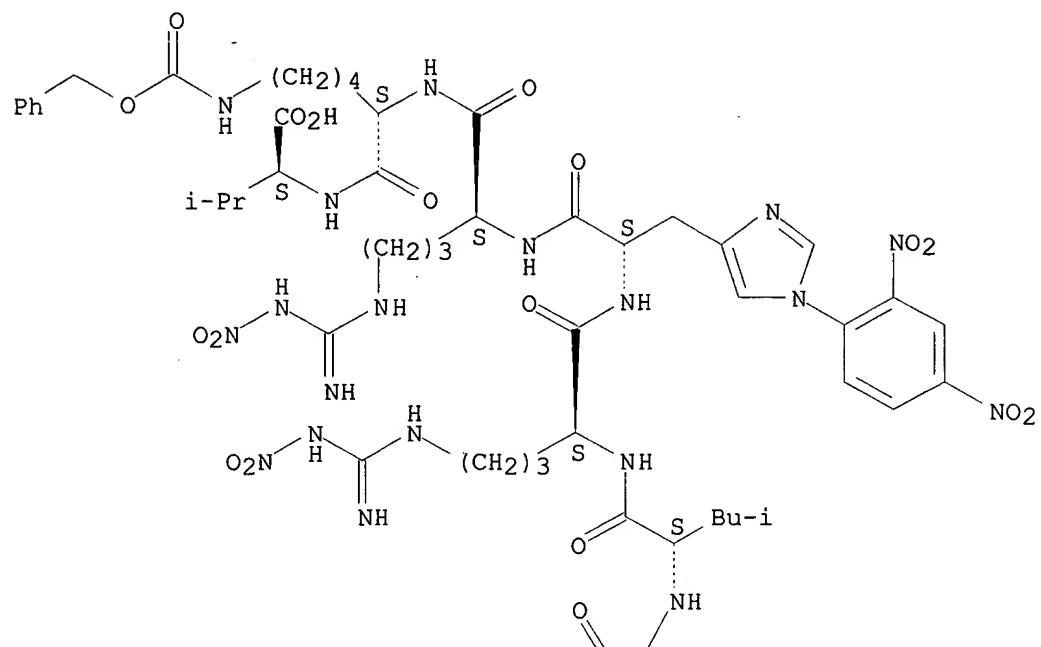
L-ornithyl]-1-(2,4-dinitrophenyl)-L-histidyl]-N5-[imino(nitroamino)methyl]-L-ornithyl]-N6-[(phenylmethoxy)carbonyl]-L-lysyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

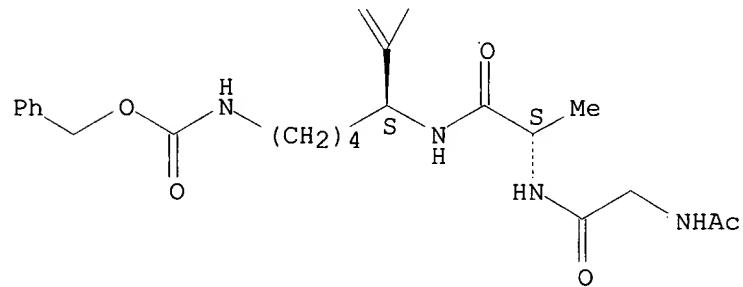
Searched by John Dantzman

308-4488

PAGE 1-A



PAGE 2-A



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|--------------|----|--|
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| NEWS | 2 | Sep 29 The Philippines Inventory of Chemicals and Chemical Substances (PICCS) has been added to CHEMLIST |
| NEWS | 3 | Oct 27 New Extraction Code PAX now available in Derwent Files |
| NEWS | 4 | Oct 27 SET ABBREVIATIONS and SET PLURALS extended in Derwent World Patents Index files |
| NEWS | 5 | Oct 27 Patent Assignee Code Dictionary now available in Derwent Patent Files |
| NEWS | 6 | Oct 27 Plasdoc Key Serials Dictionary and Echoing added to Derwent Subscriber Files WPIDS and WPIX |
| NEWS | 7 | Nov 29 Derwent announces further increase in updates for DWPI |
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| NEWS | 12 | Dec 17 Corrosion Abstracts on STN |
| NEWS | 13 | Dec 17 SYNTHLINE from Prous Science now available on STN |
| NEWS | 14 | Dec 17 The CA Lexicon available in the CAPLUS and CA files |
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=> s murphy a?/au

L1 512 MURPHY A?/AU

=> s l1 and "resin?"

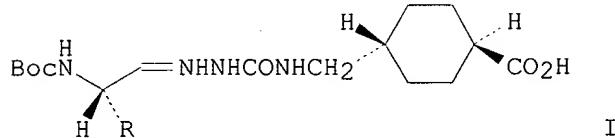
L2 6 L1 AND "RESIN?"

=> s l1 and "semicarbazone?"

L3 1 L1 AND "SEMICARBAZONE?"

=> d 13 ibib abs

L3 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1992:194851 CAPLUS
DOCUMENT NUMBER: 116:194851
TITLE: Automated synthesis of peptide C-terminal aldehydes
AUTHOR(S): Murphy, Aileen M.; Dagnino, Raymond, Jr.;
Vallar, Pureza L.; Trippe, Anthony J.; Sherman,
Shannon L.; Lumpkin, Richard H.; Tamura, Susan Y.;
Webb, Thomas R.
CORPORATE SOURCE: Corvas Int. Inc., San Diego, CA, 92121, USA
SOURCE: J. Am. Chem. Soc. (1992), 114(8), 3156-7
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB The title compds., e.g. Boc-D-Leu-X-Arg-H (Boc = Me₃CO₂C; X = Pro, Ser) and Boc-Ala-Ala-Pro-X₁-H (X₁ = Ala, Val, Phe) were prep'd. by the solid phase method using linkers I [R = (protected) amino acid side chain]. Peptides are assembled using std. Boc protocols, and cleaved from the resin with dil. aq. acid/formaldehyde to give protected peptide C-terminal aldehydes. Arginal-contg. peptide aldehydes with various hydrogen/Pd labile protecting groups can be deprotected in a single step to give the unprotected peptide aldehydes after purifn. by reverse-phase HPLC.

=> d his

(FILE 'HOME' ENTERED AT 14:25:03 ON 24 JAN 2001)

FILE 'CAPLUS, CAOLD' ENTERED AT 14:25:23 ON 24 JAN 2001
L1 512 S MURPHY A?/AU
L2 6 S L1 AND "RESIN?"
L3 1 S L1 AND "SEMICARBAZONE?"

=> s 12 and 13

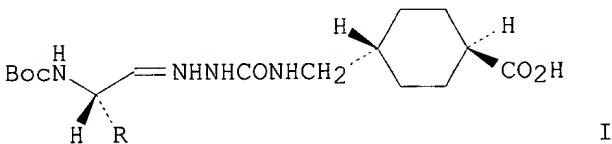
L4 1 L2 AND L3

=> d 14

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2001 ACS
AN 1992:194851 CAPLUS
DN 116:194851
TI Automated synthesis of peptide C-terminal aldehydes
AU Murphy, Aileen M.; Dagnino, Raymond, Jr.; Vallar, Pureza L.;
Trippe, Anthony J.; Sherman, Shannon L.; Lumpkin, Richard H.; Tamura,
Susan Y.; Webb, Thomas R.
CS Corvas Int. Inc., San Diego, CA, 92121, USA
SO J. Am. Chem. Soc. (1992), 114(8), 3156-7
CODEN: JACSAT; ISSN: 0002-7863
DT Journal
LA English

=> d 12 1-6 ibib abs

L2 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1992:194851 CAPLUS
DOCUMENT NUMBER: 116:194851
TITLE: Automated synthesis of peptide C-terminal aldehydes
AUTHOR(S): Murphy, Aileen M.; Dagnino, Raymond, Jr.;
Vallar, Pureza L.; Trippe, Anthony J.; Sherman,
Shannon L.; Lumpkin, Richard H.; Tamura, Susan Y.;
Webb, Thomas R.
CORPORATE SOURCE: Corvas Int. Inc., San Diego, CA, 92121, USA
SOURCE: J. Am. Chem. Soc. (1992), 114(8), 3156-7
CODEN: JACSAT; ISSN: 0002-7863
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The title compds., e.g. Boc-D-Leu-X-Arg-H (Boc = Me₃CO₂C; X = Pro, Ser) and Boc-Ala-Ala-Pro-X1-H (X1 = Ala, Val, Phe) were prep'd. by the solid phase method using linkers I [R = (protected) amino acid side chain]. Peptides are assembled using std. Boc protocols, and cleaved from the resin with dil. aq. acid/formaldehyde to give protected peptide C-terminal aldehydes. Argininal-contg. peptide aldehydes with various hydrogen/Pd labile protecting groups can be deprotected in a single step to give the unprotected peptide aldehydes after purifn. by reverse-phase

L2 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1972:477429 CAPLUS
 DOCUMENT NUMBER: 77:77429
 TITLE: Material performance of carbon phenolic ablators and
 pyrolytic graphite coatings in nozzles subjected to
 multiple pulse duty cycles
 AUTHOR(S): Wool, Mitchell R.; Baker, Duane L.; Murphy,
 Andrew J.
 CORPORATE SOURCE: Aerotherm Corp., Mountain View, Calif., USA
 SOURCE: U. S. Nat. Tech. Inform. Serv., AD Rep. (1971), No.
 738622, 161 pp. Avail.: NTIS
 From: Gov. Rep. Announce. (U.S.) 1972, 9, 266
 CODEN: XADRCH
 DOCUMENT TYPE: Report
 LANGUAGE: English

AB Measurements and anal. of the thermal and ablative response of 5
 multiple-pulse duty-cycle rocket nozzles were performed. Nozzles were
 fired on a solid-propellant simulator with a test stream compn.,
 designated ANB-3066, that contained 16% Al. Nominal chamber pressure for
 each of the various firing pulses was 750 psia. Material temp. histories
 were recorded at several locations in each nozzle. Post-test measurements
 of surface recession, char penetration, and d. vs. depth, as well as
 thermocouple data, are used for comparison with 1- and 2-dimensional heat
 conduction and material-ablation calcns.

L2 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1970:122873 CAPLUS
 DOCUMENT NUMBER: 72:122873
 TITLE: Crosslinked cotton textiles
 INVENTOR(S): Murphy, Alton Launcelot; Welch, Clark M.;
 Margavio, Matthew F.; Cooper, Albert S., Jr.
 PATENT ASSIGNEE(S): United States Dept. of Agriculture
 SOURCE: U.S., 5 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| US 3498739 | A | 19700303 | US 1965-426452 | 19650118 |

AB Wash-and-wear crosslinked cotton fabrics with improved tearing and
 breaking strength were prep'd. from pretreated yarns finished with HCHO,
 dimethylolethyleneurea (I), tris(1-aziridinyl)phosphine oxide (II), or
 bis(2-hydroxyethyl) sulfone (III) and a catalyst, then dry-cured. Thus,
 a 200-yd skein of 31/2 gray yarn was mercerized at normal length 5 min
 with 11% NaOH plus 1% cresylic wetting agent at 0.degree., washed, and
 air-dried loose, treated loose 5 min with an aq. soln. contg. 7% I and
 0.5% buffered Zn(NO₃)₂, centrifuged to 70-80% wet pickup, and dried loose
 4 min at 85.degree.. After curing 4 min at 150.degree., the skeins were
 washed in hot water with a 0.1 % nonionic wetting agent and dried loose 40
 min at 85.degree. to 3.6% add-on to give 897 g breaking strength (24%
 increase). Similar results were obtained using finishes contg. 11% II and
 0.77% Zn(BF₄)₂, 9% III and 2% Na₂CO₃, or 7.5% HCHO and 2% MgCl₂.

L2 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1970:42385 CAPLUS
 DOCUMENT NUMBER: 72:42385
 TITLE: Lightweight urea-formaldehyde fertilizers
 INVENTOR(S): Murphy, Allen Milton, Jr.; Retzke, Franklin
 A.; Johnson, John Raymond

PATENT ASSIGNEE(S): Borden Co.
 SOURCE: U.S., 3 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|---|----------|-----------------|----------|
| US 3479175 | A | 19691118 | US 1966-592291 | 19661107 |
| AB | Complete fertilizers of low bulk d. are prep'd. by mixing urea with dry sources of HCHO, phosphate, and potash, heating to 160.degree.-75.degree.F., extruding, and cooling to obtain high N and P contg. granules. An example of a HCHO source is paraformaldehyde (I); the urea/I mole ratio is crit. and must be >6. The final mixt. contains >30% urea + urea-HCHO resin , >20% total N, and has a bulk d. <40 lb/ft ³ . The granule diam. is 0.065-0.131 in. For example, ground cryst. urea 1436, (NH ₄) ₂ HPO ₄ 189, KCl 334, and finely ground I 41 lb. were mixed, heated to 165.degree.F. and extruded to prod uce 6-10 mesh particles of bulk d. 38 lb/ft ³ . Product anal. was N 35.18, P ₂ O ₅ 5.50, and K ₂ O 9.92%. The fertilizer is useful on lawns and gardens. | | | |

L2 ANSWER 5 OF 6 CAOLD COPYRIGHT 2001 ACS
 ACCESSION NUMBER: CA25:2575a CAOLD
 TITLE: Dye intermediates
 AUTHOR NAME: Mieg, W.; Stein, B.; Trautner, W.
 DOCUMENT TYPE: Patent
 TITLE: Fuchsin
 AUTHOR NAME: Ignatyev, S. N.; Vasin, I. I.
 DOCUMENT TYPE: Patent
 TITLE: Pastes from insol. mordant dyes
 AUTHOR NAME: Vinetzkaya, E. Ya.
 DOCUMENT TYPE: Patent
 TITLE: Pasting S dyes with **resin** soaps
 AUTHOR NAME: Schweitzer-Hennig, F.; Hagge, W.
 DOCUMENT TYPE: Patent
 TITLE: anthanthrone derivs.
 AUTHOR NAME: Kunz, M. A.; Koberle, K.; Berthold, E.
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.
 DOCUMENT TYPE: Patent
 TITLE: benzoin condensation products
 PATENT ASSIGNEE: Societe pour l'industrie chimique a Bale
 DOCUMENT TYPE: Patent
 TITLE: bisulfite compd. of alizarin blue
 AUTHOR NAME: Razumeev, A.
 DOCUMENT TYPE: Patent
 TITLE: dye intermediates
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.
 DOCUMENT TYPE: Patent
 TITLE: dyes (sulfur)
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.
 DOCUMENT TYPE: Patent
 TITLE: improving the solv. of dyes
 AUTHOR NAME: Murphy, A. R.; Oesch, J. B.
 PATENT ASSIGNEE: Newport Chemical Corp.
 DOCUMENT TYPE: Patent
 TITLE: parafuchsin
 AUTHOR NAME: Ignatyev, S. N.; Vasin, I. I.
 DOCUMENT TYPE: Patent
 TITLE: pasting S dyes with **resin** soaps
 PATENT ASSIGNEE: I. G. Farbenindustrie Akt.-Ges.
 DOCUMENT TYPE: Patent
 PATENT NO. KIND DATE

PI DE 517498
PI DE 518198
PI DE 518231
PI FR 37391 Addition
PI FR 37484 Addition
PI GB 338764
PI GB 339324
PI GB 339410
PI RU 22888 Application
PI RU 49462 Application
PI RU 50998 Application
PI RU 59307 Application
PI US 1796115 1931

L2 ANSWER 6 OF 6 CAOLD COPYRIGHT 2001 ACS
ACCESSION NUMBER: CA24:514a CAOLD
TITLE: "ripening" of copals
AUTHOR NAME: Scheiber, J.
TITLE: Detn. of the acid index in the manuf. of varnishes
AUTHOR NAME: Demolder, L.
TITLE: Effect of different methods of application with different
woods on the durability of spar varnish
AUTHOR NAME: Friese, R. W.; Meyer, J. H.; Zinzer, A.; Murphy, A.
TITLE: Effect of plasticizers in clear and pigmented varnishes
AUTHOR NAME: Harrison, W. F.
TITLE: Fresco ordeal-its chem. and artistic implications
AUTHOR NAME: Wilson, T.
TITLE: Okume resin
AUTHOR NAME: Tomeo (Tomeo-Lacrue), M.; Garcia-Viana, J.
TITLE: Technology of cellulose acetate-its relation to plasticizers
and solvents
AUTHOR NAME: Staud, C. J.
TITLE: Use of synthetic resins in lacquer and varnish
AUTHOR NAME: Stauderman, A. E.
TITLE: Varnish fires
AUTHOR NAME: Langton, J. M.
TITLE: boiled linseed oil
AUTHOR NAME: Remington, J. S.

=> s "semicarbazone?"

L5 3558 "SEMICARBAZONE?"

=> s 15 and "resin?"

L6 45 L5 AND "RESIN?"

=> dup rem

ENTER L# LIST OR (END):16

DUPLICATE IS NOT AVAILABLE IN 'CAOLD'.
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PROCESSING COMPLETED FOR L6
L7 45 DUP REM L6 (0 DUPLICATES REMOVED)

=> d 17 1-10 ibib abs

L7 ANSWER 1 OF 45 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2000:277960 CAPLUS
DOCUMENT NUMBER: 132:308661

TITLE: Preparation of (substituted)acyl dipeptidyl inhibitors
 of the ice/ced-3 family of cysteine proteases
 INVENTOR(S): Karanewsky, Donald S.; Kalish, Vincent J.; Robinson,
 Edward D.; Ullman, Brett R.
 PATENT ASSIGNEE(S): Idun Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 142 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|--|-------------------|-----------------|----------|
| WO 2000023421 | A1 | 20000427 | WO 1999-US24756 | 19991022 |
| W: | AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | |
| RW: | GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | |
| PRIORITY APPLN. INFO.: | | MARPAT 132:308661 | US 1998-177546 | 19981022 |

OTHER SOURCE(S): MARPAT 132:308661
 AB Compds. of formula R1X(CH2)nCHR2CO-A-NHCH[(CH2)qCO2R3]CO-B [A is a natural or unnatural amino acid; B = H, D, alkyl, cycloalkyl, (un)substituted Ph or naphthyl, 2-benzoxazolyl, halomethyl, (CH2)mcycloalkyl, (CH2)m(1- or 2-naphthyl), substituted 2-oxazolyl, (un)substituted (CH2)mphenyl, CH2OCO(aryl), or CH2OCO(heteroaryl), etc.; X = CH2, CO, O, S, NH, CONH, CH2CONH; R1 = (un)substituted Ph, naphthyl, or heteroaryl; R2 = H, alkyl, cycloalkyl, (un)substituted Ph, (CH2)mNH2, (un)substituted (CH2)mphenyl, (CH2)mcycloalkyl, (CH2)mheteroaryl, etc.; R3 = H, alkyl, cycloalkyl, (cycloalkyl)alkyl, (un)substituted phenylalkyl; m = 1-4, n = 0-2; q = 1-2] or their pharmaceutically acceptable salts were prep'd. as inhibitors of ICE/ced-3 family of cysteine proteases (ICE = interleukin-1.beta. converting enzyme). Thus, coupling of (1-naphthylamino)acetic acid with (3S)-3-(leucinylamino)-4-oxobutanoic acid tert-Bu ester **semicarbazone** (prepn. given) followed by deprotection of the resulting intermediate with TFA, and treatment with a 3:1:1 soln. of MeOH/AcOH/37% HCHO afforded (3S)-3-[(N-((1-naphthylamino)acetyl)leucinyl)amino]-4-oxobutanoic acid which showed IC50 = 0.033 .mu.M for mICE, 0.013 .mu.M for CPP32, and 0.037 .mu.M for MCH-2 enzyme assays, resp. The invention is also directed to pharmaceutical compns. contg. these compds., as well as the use of such compns. in the treatment of patients suffering inflammatory, autoimmune and neurodegenerative diseases, for the prevention of ischemic injury, and for the preservation of organs that are to undergo a transplantation procedure.

REFERENCE COUNT: 16

REFERENCE(S):

- (1) Becker, M; US 5714484 A 1998 CAPLUS
- (2) Bemis, G; US 5656627 A 1997 CAPLUS
- (3) Ferring Res Ltd; GB 2292149 A 1996 CAPLUS
- (5) Merck & Co Inc; WO 9966945 A 1999 CAPLUS
- (6) Ono Pharmaceutical Co; EP 0761680 A 1997 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:84821 CAPLUS

DOCUMENT NUMBER: 132:137730

TITLE: Preparation of derivatized **resins** useful for solid-phase peptide synthesis, combinatorial chemistry, and peptide or protein purification and separation

INVENTOR(S): Siev, Daniel V.; Semple, J. Edward; Weinhouse, Michael I.
 PATENT ASSIGNEE(S): Corvas International Inc., USA
 SOURCE: PCT Int. Appl., 96 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2000005243 | A2 | 20000203 | WO 1999-US16828 | 19990723 |
| WO 2000005243 | A3 | 20000420 | | |
| W: JP RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |

PRIORITY APPLN. INFO.: US 1998-122576 19980724

OTHER SOURCE(S): CASREACT 132:137730

AB This invention provides a method for producing a derivatized **resin** of formula R4NH(C:X)Y-Z-SS [R4 = (un)protected NH2 or OH; X = O, S, NR7; R7 = H, alkyl, alkenyl, aryl, aralkyl, cycloalkyl, heterocyclyl; Y = absent, NH, CH2; Z = absent, NH, O, CO, S, SO2, alkyl, alkenyl, aryl, aralkyl, cycloalkyl, heterocyclyl, and combinations thereof, with provisos; SS = solid support], useful in the arts of solid-phase peptide synthesis, combinatorial chem., and peptide or protein purifn. and sepn. Methods for synthesizing the derivatized **resin**, the prototypical example of which is hydrazyl-carbonyl-aminomethylated polystyrene (HCAM **resin**), are disclosed. Thus, aminomethylated polystyrene was coupled with t-Bu carbazate using 1,1-carbonyldimidazole in DMF and deprotected with DCM/TFA to give HCAM **resin**. Alternatively, HCAM **resin** was also prep'd. by coupling of hydrazine to aminomethylated polystyrene using 1,1-carbonyldimidazole in DMF. Reaction of an aldehyde or ketoamide with the free amino group of the **resin** results in an immobilized product, through a **semicarbazone** moiety, which can be manipulated using std. solid-phase peptide synthetic methods. As opposed to known methods for peptide aldehyde or ketoamide synthesis, the process of this invention provides, among other benefits, a method of solid-phase peptide or peptide analog synthesis that minimizes the amt. of soln. phase synthetic steps required.

L7 ANSWER 3 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 2000:34853 CAPLUS
 DOCUMENT NUMBER: 132:93655
 TITLE: Preparation of C-terminal modified oxamyl dipeptides as inhibitors of the ICE/ced-3 family of cysteine proteases
 INVENTOR(S): Karanewsky, Donald S.; Ternansky, Robert J.
 PATENT ASSIGNEE(S): Idun Pharmaceuticals, Inc., USA
 SOURCE: PCT Int. Appl., 105 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 2000001666 | A1 | 20000113 | WO 1999-US15074 | 19990701 |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, | | | | |

TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ,
 MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
 ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 AU 9948569 A1 20000124 AU 1999-48569 19990701
 PRIORITY APPLN. INFO.: US 1998-91689 19980702
 US 1998-177549 19981022
 WO 1999-US15074 19990701

OTHER SOURCE(S): MARPAT 132:93655

AB Oxamyl dipeptides R1NHCO-CO-A-NHCH(CO-B)CH₂CO₂R₂ [A is a natural or unnatural amino acid; B = H, D, cycloalkyl, (un)substituted Ph or naphthyl, 2-benzoxazolyl, substituted 2-oxazolyl, halomethyl, (CH₂)_ncycloalkyl, (CH₂)nphenyl, (CH₂)n(1- or 2-naphthyl), (CH₂)nheteroaryl (n = 1-4), etc.; R₁ = alkyl, cycloalkyl, cycloalkylalkyl, (un)substituted Ph, phenylalkyl, or naphthyl, etc.; R₂ = H, alkyl, cycloalkyl, cycloalkylalkyl, (un)substituted Ph, phenylalkyl, naphthyl, or naphthylalkyl] were prep'd. as inhibitors of the ICE/ced-3 family of cysteine protease (ICE = interleukin-1.beta. converting enzyme). Thus, (3S)-3-[[N-(1-naphthylloxamyl)leucinyl]amino]-4-oxobutanoic acid, prep'd. via coupling of 1-naphthylloxamic acid with (3S)-3-(leucinylamino)-4-oxobutanoic acid tert-Bu ester **semicarbazone**, showed IC₅₀ = 0.027 .mu.M for mICE and IC₅₀ = 0.010 .mu.M for CPP32 enzyme assays.

REFERENCE COUNT: 3

REFERENCE(S):
 (1) Sandoz Ltd; EP 0618223 A 1994 CAPLUS
 (2) Sterling Winthrop Inc; EP 0623592 A 1994 CAPLUS
 (3) Vertex Pharma; WO 9722619 A 1997 CAPLUS

L7 ANSWER 4 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:233888 CAPLUS
 DOCUMENT NUMBER: 132:254542
 TITLE: Polymer-coated sand for shell molds with minimized formaldehyde release
 INVENTOR(S): Suzuki, Noriaki; Nagasaka, Eiichi; Kaji, Kenji;
 Tomishige, Hiromi
 PATENT ASSIGNEE(S): Aisin Kako Co., Ltd., Japan; Toyota Motor Corp.
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|----------|
| JP 2000102841 | A2 | 20000411 | JP 1998-275400 | 19980929 |

AB The sand has thermosetting **resin** coatings contg. carboxylic acid hydrazide. The coatings may also contain gtoreq.1 N-contg. compds. selected from urea, thioureas, arom. compds. (e.g. aminophenol, phenylhydrazine, aniline), amides (e.g. acetamide, acetanilide), and **semicarbazone**. Strong molds with minimized formaldehyde gas generation are obtained.

L7 ANSWER 5 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:796267 CAPLUS
 TITLE: Solid phase synthesis of caspase-3 inhibitors.
 AUTHOR(S): Grimm, Erich L.; Aspiotis, R.; Bayly, C.; Garcia-Calvo, M.; Giroux, A.; Han, Yongxin; McKay, D.; Nicholson, D.; Peterson, E.; Rasper, D.; Renaud, J.; Roy, S.; Tam, J.; Tawa, P.; Thornberry, N.; Vaillancourt, J.; Zamboni, R.; Xanthoudakis, S.
 CORPORATE SOURCE: Merck Frosst Centre for Therapeutic Research, Kirkland, QC, H9H 3L1, Can.
 SOURCE: Abstr. Pap. - Am. Chem. Soc. (2000), 220th, MEDI-268

CODEN: ACSRAL; ISSN: 0065-7727

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; Meeting Abstract
LANGUAGE: English

AB Aspartyl aldehyde and ketone libraries can be readily accessed using Webb's **semicarbazone** linker on Merrifield **resin**. This strategy has lead to the identification of small capped peptidyl ketone derivs. with good intrinsic potency and selectivity for caspase-3. Improved cell permeability of these compds. with respect to the tetrapeptide inhibitors has also been demonstrated in both the Caco Assay and the Filtration Assay using radiolabeled drugs.

L7 ANSWER 6 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:182809 CAPLUS
DOCUMENT NUMBER: 132:199650
TITLE: Ion-exchange studies of **resin** copolymers derived from aromatic hydroxy compounds
AUTHOR(S): Das, S. C.
CORPORATE SOURCE: Department of Chemistry, S. V. M. College, Jagatsinghpur, 754 103, India
SOURCE: J. Indian Chem. Soc. (2000), 77(2), 66-69
CODEN: JICSAH; ISSN: 0019-4522
PUBLISHER: Indian Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The ion-exchange capacity, effect of electrolytes on metal uptake, rate of metal uptake and distribution of metal ion at different pHs of **resin** copolymers derived from thiosemicarbazone derivs. of phenolic compds. shows higher order than the **resin** copolymer derived from **semicarbazone** derivs. The results are compared with the com. ion-exchangers.

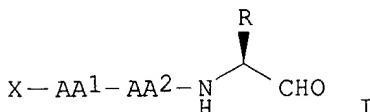
REFERENCE COUNT: 6

REFERENCE(S):
(1) Cotton, F; Advance Inorganic Chemistry, 3rd ed.
1972
(2) Das, S; J Polym Mater 1997, V14, P219 CAPLUS
(3) Davadov, S; Coord Chem Rev 1975, V16, P195
(5) Mohanty, P; J Appl Polym Sci 1991, V42, P2261
CAPLUS
(6) Senapati, M; J Appl Polym Sci 1992, V45, P521
CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 7 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:788495 CAPLUS
DOCUMENT NUMBER: 132:222836
TITLE: Novel Hydrazino-Carbonyl-Amino-Methylated polystyrene (HCAM) **resin** methodology for the synthesis of P1-aldehyde protease inhibitor candidates
AUTHOR(S): Siev, Daniel V.; Semple, J. Edward
CORPORATE SOURCE: Department of Medicinal Chemistry, Corvas International Inc., San Diego, CA, 92121, USA
SOURCE: Org. Lett. (2000), 2(1), 19-22
CODEN: ORLEF7; ISSN: 1523-7060
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



AB A new strategy for the synthesis of peptidyl and peptidomimetic aldehydes I [X = Cbz, PhCH₂SO₂, PhCO, MeCO; AA1 = homoGlu, Asp; AA2 = Sar, Nva; AA1AA2 = 3(S)-amino-2-oxo-1-piperidinoacetyl; R = (CH₂)₃NHC(:NH)NH₂, CH₂C.tpbond.CH, CH₂CH:CH₂, CH₂SMe] on HCAM solid support is described. The appropriate C-terminal aldehyde precursors were prepd. and anchored to a resin support via a **semicarbazone** linkage (HCAM resin). After synthetic elaboration, acidic hydrolysis efficiently delivered I in good overall yields and in excellent purity.

REFERENCE COUNT: 41

REFERENCE(S):

- (1) Basak, A; Int J Peptide Protein Res 1994, V44, P253 CAPLUS
- (2) Brown, A; J Am Chem Soc 1997, V119, P3288 CAPLUS
- (3) Coffen, D; Med Chem Res 1998, V8, P206 CAPLUS
- (5) Fehrentz, J; J Org Chem 1997, V62, P6792 CAPLUS
- (6) Fehrentz, J; Tetrahedron Lett 1995, V36, P7871 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 8 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1999:524518 CAPLUS

DOCUMENT NUMBER: 131:286816

TITLE: Solid phase synthesis of peptide C-terminal **semicarbazones** and aldehydes

AUTHOR(S): Patterson, Jennifer A.; Ramage, Robert

CORPORATE SOURCE: The Edinburgh Centre For Protein Technology, Department of Chemistry, The University of Edinburgh, Edinburgh, EH9 3JJ, UK

SOURCE: Tetrahedron Lett. (1999), 40(33), 6121-6124
CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 131:286816

AB A new linker based on the dibenzosuberyl system was developed in order to synthesize peptide C-terminal **semicarbazones** which can be readily converted into peptide C-terminal aldehydes. The method uses Fmoc-methodol. and proceeds with no loss of stereochem. integrity.

REFERENCE COUNT: 24

REFERENCE(S):

- (1) Bajusz, S; J Med Chem 1990, V33, P1729 CAPLUS
- (2) Basak, A; Int J Peptide Protein Res 1994, V44, P253 CAPLUS
- (3) Chapman, K; Bioorg Med Chem Lett 1992, V2, P613 CAPLUS
- (4) Ede, N; Tetrahedron Lett 1997, V38, P7119 CAPLUS
- (5) Fehrentz, J; FEBS Lett 1984, V167, P273 CAPLUS

ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 9 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1998:394349 CAPLUS

DOCUMENT NUMBER: 129:54608

TITLE: Inhibitors of interleukin-1. β . converting enzyme

INVENTOR(S): Golec, Julian M. C.; Lauffer, David J.; Livingston, David J.; Mullican, Michael D.; Murcko, Mark A.; Nyce, Philip L.; Robidoux, Andrea L. C.; Wannamaker, Marion W.

PATENT ASSIGNEE(S): Vertex Pharmaceuticals Incorporated, USA; Golec, Julian M. C.; Lauffer, David J.; Livingston, David J.; Mullican, Michael D.; Murcko, Mark A.; Nyce, Philip L.; Robidoux, Andrea L. C.; Wannamaker, Marion W.

SOURCE: PCT Int. Appl., 135 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

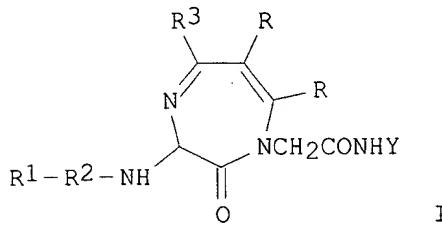
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9824805 | A1 | 19980611 | WO 1997-US22289 | 19971205 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM | | | | |
| RW: GH, KE, LS, MW, SD, SZ, ÜG, ŽW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG | | | | |
| AU 9858960 | A1 | 19980629 | AU 1998-58960 | 19971205 |
| EP 944645 | A1 | 19990929 | EP 1997-954531 | 19971205 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI | | | | |
| PRIORITY APPLN. INFO.: | | | US 1996-32792 | 19961206 |
| | | | US 1997-42660 | 19970404 |
| | | | US 1997-53001 | 19970626 |
| | | | WO 1997-US22289 | 19971205 |

OTHER SOURCE(S): MARPAT 129:54608

GI



AB The present invention relates to novel classes of compds. I [RC:CR is an optionally substituted aryl or heteroaryl ring; R1 = aryl, heteroaryl, alkylaryl, alkylheteroaryl; R2 = bond, CO, COCO, SO2, OCO, NHCO, NHSO2, NHOCOCO, CH:CHCO, OCH2CO, NHCH2CO, etc.; R3 = aryl, heteroaryl, cycloalkyl, alkyl, dialkylamino; Y = R5CO(CH2)mCH2CH(COR6) or related lactones or **semicarbazones**, where R5 = OH, alkoxy, NHOH, etc.; R6 = H, HOCH2, aroyloxymethyl, etc.; m = 0 or 1] which were prep'd. as inhibitors of interleukin-1.beta. converting enzyme. (ICE). Thus, (3S)-3-[3(R,S)-[(benzyloxycarbonyl)amino]-1,3-dihydro-2-oxo-5-phenyl-2H-1,4-benzodiazepin-1-acetylamino]-4-oxobutyric acid, prep'd. from 3(R,S)-[(benzyloxycarbonyl)amino]-1,3-dihydro-2-oxo-5-phenyl-2H-1,4-benzodiazepin-1-acetic acid and (3S)-3-(1-fluorenylmethoxycarbonylamino)-4-oxobutyric acid tert-Bu ester **semicarbazone**, showed ICE inhibition const.

Ki = 650 nM and IC50 = 20,000 nM.

L7 ANSWER 10 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1997:574514 CAPLUS

DOCUMENT NUMBER: 127:220992

TITLE: Preparation of methionine sulfone and S-substituted cysteine sulfone derivatives as thrombin or factor Xa inhibitors

INVENTOR(S): Abelman, Matthew Mark; Ardecky, Robert John; Nutt, Ruth Foelsche

PATENT ASSIGNEE(S): Corvas International Inc., USA
SOURCE: U.S., 88 pp. Cont.-in-part of U.S. Ser. No. 234,811, abandoned.

CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| US 5658939 | A | 19970819 | US 1995-423584 | 19950418 |
| US 5776927 | A | 19980707 | US 1994-229298 | 19940418 |
| US 5681844 | A | 19971028 | US 1994-234811 | 19940428 |
| US 5770600 | A | 19980623 | US 1995-473647 | 19950606 |
| PRIORITY APPLN. INFO.: | | | US 1994-229298 | 19940418 |
| | | | US 1994-234811 | 19940428 |
| | | | US 1995-423584 | 19950418 |

OTHER SOURCE(S): MARPAT 127:220992
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = alkyl, alkenyl, (substituted) aryl, heterocyclyl such as indole, etc.; X = CO, O2C, NHCO, SO2, O3S, NHSO2, etc.; R2 = CH2S(O)_q(CH2)_mZ where q = 0-2, m = 1-6 and Z = H, (substituted) CO2H, (substituted) CONH2; Y = (CH2)_n where n = 1-3] were prepd. as thrombin or factor Xa inhibitors. Methionine sulfone II was prepd. from the resin-bound semicarbazone III (R = MBHA resin); III was coupled with Boc-Pro-OH and N-cyclohexylmethanesulfonyl-L-methionine sulfone, successively, followed by cleavage of the protected semicarbazone from the resin and hydrolysis of the semicarbazone to give II. II exhibited IC50 values of 0.00066 and 0.030 .mu.M against thrombin and plasmin, resp.

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FILE 'CAPLUS, CAOLD' ENTERED AT 14:25:23 ON 24 JAN 2001

L1 512 S MURPHY A?/AU
L2 6 S L1 AND "RESIN?"
L3 1 S L1 AND "SEMICARBAZONE?"
L4 1 S L2 AND L3
L5 3558 S "SEMICARBAZONE?"
L6 45 S L5 AND "RESIN?"
L7 45 DUP REM L6 (0 DUPLICATES REMOVED)

=> d 16 12-45 ibib abs

L6 ANSWER 12 OF 45 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:130466 CAPLUS
DOCUMENT NUMBER: -126:172246
TITLE: Spectral characteristics and analytical applications
of polymer-metal complexes derived from
poly(salicylaldehyde acrylate)-divinylbenzene
semicarbazone resins
AUTHOR(S): Prabhakar, L. D.; Marysaral, A.
CORPORATE SOURCE: Dep. Chem., Annamalai Univ., Annamalai Nagar, 608 002,
India
SOURCE: Polym. Int. (1997), 42(2), 149-156
CODEN: PLYIEI; ISSN: 0959-8103

PUBLISHER: Wiley
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Salicylaldehyde acrylate was prep'd. and subjected to suspension polymn. with divinylbenzene as a crosslinking agent. The resulting network polymer was ligated with **semicarbazone**. The ligated polymer was treated with transition metal ions (Cu^{2+} , Ni^{2+}). The polymer-metal complexes were characterized by Fourier transform IR, ^{13}C and 1H NMR, ^{13}C cross-polymn. magic-angle spinning NMR, magnetic studies, ESR spectroscopy, optical microscopy and SEM. Metal uptake efficiency, reusability of the purified ligated polymer, and catalytic effects of this resin on simple ester hydrolysis were also studied.

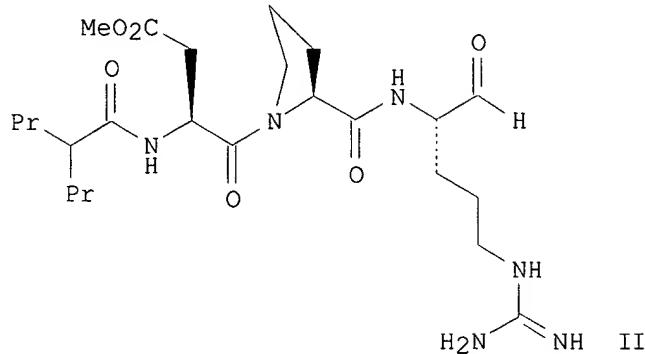
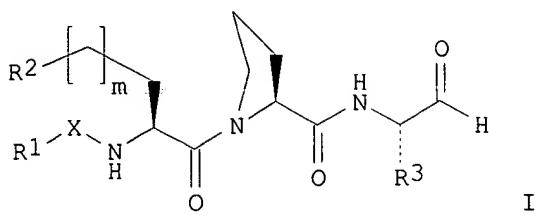
L6 ANSWER 13 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1996:387213 CAPLUS
 DOCUMENT NUMBER: 125:115912
 TITLE: Polymaleimide ion exchange resin
 AUTHOR(S): Patel, U. I.; Parmer, J. S.
 CORPORATE SOURCE: Dep. Chem., Sardar Patel Univ., Vidyanagar, 388 120, India
 SOURCE: Int. J. Polym. Mater. (1996), 33(1-2), 115-120
 CODEN: IJPMCS; ISSN: 0091-4037
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB New maleimide derivs., N-(3-hydroxy-4-acetothiosemicarbazonephenyl)maleimide and N-(3-hydroxy-4-acetosemicarbazonephenyl)maleimide were prep'd. by condensation of N-(3-hydroxy-4-acetyl phenyl)maleimide with thiosemicarbazide and semicarbazide hydrochloride, resp. These were homopolymd. and copolymd. with styrene and maleic anhydride to give chelating ion exchange resins. They were analyzed by elemental anal., IR spectral study, TGA, DSC, and mol. wt. measurements.

L6 ANSWER 14 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1996:184268 CAPLUS
 DOCUMENT NUMBER: 124:344120
 TITLE: Preparation of peptide aldehyde analogs as inhibitors of thrombosis
 INVENTOR(S): Vlasuk, George P.; Webb, Thomas R.; Pearson, Daniel A.; Abelman, Matthew M.
 PATENT ASSIGNEE(S): Corvas International, Inc., USA
 SOURCE: U.S., 49 pp., Cont.-in-part of U.S. Ser. No. 17,125, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 5492895 | A | 19960220 | US 1994-195995 | 19940211 |
| CA 2155931 | AA | 19940818 | CA 1994-2155931 | 19940214 |
| WO 9417817 | A1 | 19940818 | WO 1994-US1612 | 19940214 |
| W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| EP 684830 | A1 | 19951206 | EP 1994-909628 | 19940214 |
| EP 684830 | B1 | 19990616 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 08508716 | T2 | 19960917 | JP 1994-517424 | 19940214 |
| AT 181334 | E | 19990715 | AT 1994-909628 | 19940214 |
| US 5886146 | A | 19990323 | US 1995-459705 | 19950602 |
| US 5955576 | A | 19990921 | US 1995-484269 | 19950607 |
| PRIORITY APPLN. INFO.: | | | US 1992-836123 | 19920214 |
| | | | US 1993-17125 | 19930212 |

OTHER SOURCE(S):
 GI

MARPAT 124:344120



AB This invention provides peptide aldehyde analogs that inhibit thrombin and/or Factor Xa, and which are thought useful for preventing or treating conditions in mammals characterized by abnormal thrombosis. The compds. are described by structure I [R1 = alkyl, cycloalkylalkyl, alkenyl, (un)substituted aryl, aralkyl, or aralkenyl, perfluoroalkyl, camphoryl, etc.; X = CO, OCO, SO2, NHSO2, OSO2; m = 1, 2; R2 = CO2H, CO2R', 5-tetrazolyl; R' = alkyl, aryl, aralkyl; R3 = (CH2)3NHC(:NH)NH2] and their pharmaceutically acceptable salts.. For example, Boc-Asp(OCH2Ph)-OH underwent a sequence of transesterification, coupling with H-Pro-OCH2Ph, removal of the Boc group, amidation with Pr2CHCOCl, hydrogenolysis, coupling with a **semicarbazone**- and nitro-protected L-argininal deriv., and deprotection, to give title compd. II. The IC50 values of II for inhibition of thrombin, Factor Xa, and plasmin in vitro were 0.80, 301, and 261 nm, vs. 3.6, 5300, and 144 nm for the known aldehyde analog Boc-D-Phe-Pro-Arg-H.

L6 ANSWER 15 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1995:710866 CAPLUS
 DOCUMENT NUMBER: 123:113598
 TITLE: Synthesis and characterization of nickel(II), cobalt(II) and copper(II) complexes of poly(salicylaldehyde-acrylate)divinylbenzene resins
 AUTHOR(S): Prabhakar, L. D.; Umarani, C.
 CORPORATE SOURCE: Dep. Chem., Annamalai Univ., Annamalainagar, 608 002, India
 SOURCE: Indian J. Chem., Sect. A: Inorg., Bio-inorg., Phys., Theor. Anal. Chem. (1995), 34A(8), 621-4
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The polymeric chelates of Ni(II), Co(II) and Cu(II) have been prepd. from poly(salicyl aldehyde acrylate) crosslinked with divinylbenzene derivatized with oxime, **semicarbazone**, thiosemicarbazone ethylenediamine and Schiff's base. The spectra (IR, ^1H , ^{13}C and solid state ^{13}C -CP/MAS NMR) and applications of the coordination polymers have been studied.

L6 ANSWER 16 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:621577 CAPLUS
 DOCUMENT NUMBER: 123:45643
 TITLE: Preparation of printed circuits
 INVENTOR(S): Capote, Miguel A.; Todd, Michael G.; Manesis, Nicholas J.; Craig, Hugh P.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S., 18 pp. Contg. in-part of U.S. Ser. No 477,678, abandoned.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 6
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|---|----------|-----------------|----------|
| US 5376403 | A | 19941227 | US 1991-769892 | 19911001 |
| WO 9306943 | A1 | 19930415 | WO 1992-US8333 | 19921001 |
| | W: AU, BG, BR, CA, CS, FI, HU, JP, KR, NO, PL, RO, RU RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE | | | |
| AU 9227678 | A1 | 19930503 | AU 1992-27678 | 19921001 |
| AU 663342 | B2 | 19951005 | | |
| JP 07502369 | T2 | 19950309 | JP 1992-507034 | 19921001 |
| JP 2972338 | B2 | 19991108 | | |
| EP 646048 | A1 | 19950405 | EP 1992-921540 | 19921001 |
| | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE | | | |
| US 5538789 | A | 19960723 | US 1994-188658 | 19940126 |
| KR 9710170 | B1 | 19970621 | KR 1994-71007 | 19940329 |
| US 5830389 | A | 19981103 | US 1994-324060 | 19941017 |
| US 5565267 | A | 19961015 | US 1995-478453 | 19950607 |
| US 5716663 | A | 19980210 | US 1995-483079 | 19950607 |
| US 5853622 | A | 19981229 | US 1996-704467 | 19960828 |
| US 5948533 | A | 19990907 | US 1997-813809 | 19970306 |
| PRIORITY APPLN. INFO.: | | | US 1990-477678 | 19900209 |
| | | | US 1991-769892 | 19911001 |
| | | | US 1992-903042 | 19920623 |
| | | | WO 1992-US8333 | 19921001 |
| | | | US 1994-188658 | 19940126 |
| | | | US 1994-324060 | 19941017 |
| | | | US 1995-483079 | 19950607 |

AB A solder powder, a chem. protected crosslinking agent with fluxing properties, and a reactive monomer or polymer are the principal components of a conductive ink compn. for printed circuits. Depending on the intended end use, the compns. comprise .gtoreq.3 of the following: a relatively high-melting metal powder; solder powder; an active crosslinking agent which also serves as a fluxing agent; a **resin**; and a reactive monomer or polymer. The compns. are useful as improved conductive adhesives, such as for attaching elec. components to elec. circuits: the compns. comprising metal powder are ideally suited for creating the conductive paths on printed circuits. The compns. for forming conductive paths may 1st be applied to a substrate in the desired pattern, and then heated to cure it. During heating, the action of the crosslinking agent and optional reactive monomer or polymer within the mixt. fluxes the metals, enabling sintering to occur between the metal powder and the solder powder.

L6 ANSWER 17 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1995:216685 CAPLUS
 DOCUMENT NUMBER: 122:133851
 TITLE: Preparation of peptidealdehydes as specific inhibitors of factor Xa.
 INVENTOR(S): Brunck, Terence Kevin; Webb, Thomas Roy; Ripka, William Charles
 PATENT ASSIGNEE(S): Corvas International, Inc., USA
 SOURCE: PCT Int. Appl., 84 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| WO 9413693 | A1 | 19940623 | WO 1993-US12255 | 19931215 |
| W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| CA 2151044 | AA | 19940623 | CA 1993-2151044 | 19931215 |
| EP 675899 | A1 | 19951011 | EP 1994-904466 | 19931215 |
| EP 675899 | B1 | 19990317 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE AT 177752 | E | 19990415 | AT 1994-904466 | 19931215 |
| PRIORITY APPLN. INFO.: | | | US 1992-991204 | 19921215 |
| | | | WO 1993-US12255 | 19931215 |

OTHER SOURCE(S): MARPAT 122:133851
 GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Peptide aldehydes having MW .ltoreq.1000 which selectively inhibit factor Xa but which do not appreciably inhibit factor XIa, thrombin, or tissue plasminogen activator, specifically [I and II; R1 = (CH₂)₃NHC(:NH)NH₂ and mono- and disubstituted alkyl derivs. thereof; R2 = (alkyl-substituted) aralkyl; R3 = alkyl, (alkyl-substituted) aryl, aralkyl; R4 = alkyl, alkenyl, aryl, aralkyl, alkoxy, alkenyloxy, aryloxy, aralkoxy, carboxyalkyl], were prep'd. Thus, title compd. III, prep'd. by solid phase synthesis on a **semicarbazone** solid support, inhibited factor Xa, XIa, thrombin, and tissue plasminogen activator with IC₅₀ = 0.023, 20, >25, and >25 .mu.M, resp.

L6 ANSWER 18 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1995:14840 CAPLUS
 DOCUMENT NUMBER: 122:32725
 TITLE: Thermal behavior of the **resin** copolymers derived from hydroxy aromatic compounds
 AUTHOR(S): Lenka, S.; Das, S.C.; Mohapatra, N.K.; Nayak, P.L.
 CORPORATE SOURCE: Dep. Chem., Ravenshaw Coll., Cuttak, India
 SOURCE: Polym. Sci. (1994), Volume 2, 786-92. Editor(s): Bhardwaj, I. S. -Allied Publ.: New Delhi, India.
 CODEN: 60AIAY

DOCUMENT TYPE: Conference
 LANGUAGE: English

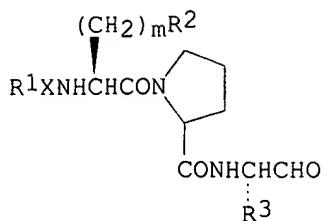
AB A large no. of **resin** copolymers prep'd. by condensing 2-hydroxy, 2,4-dihydroxy acetophenone and 2,4-dinitrophenyl hydrazone, semi-carbazone, thiosemicarbazone derivs. of hydroxy acetophenones with arom. hydroxy compds. and formaldehyde/furfural in the presence of acids and bases as the catalysts was characterized. The IR and NMR spectra of the **resins** were taken to study the structural repeat units of

the **resin** copolymers. The thermogravimetric anal. of the **resins** were carried out. The values of the energy of the activation of the degrdn. of the **resins** were computed by using different kinetic equations. The kinetic parameters for the degrdn. mechanism of the **resins** have also been evaluated by using a novel Lotus package computer anal. method.

L6 ANSWER 19 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1994:681987 CAPLUS
 DOCUMENT NUMBER: 121:281987
 TITLE: Synthetic **resins** XXV: Chelating ion-exchange properties of **resins** derived from **semicarbazone** of 4-hydroxy acetophenone-substituted benzoic acid-formaldehyde
 AUTHOR(S): Bastia, T.K.; Lenka, S.; Nayak, P.L.
 CORPORATE SOURCE: Dep. Chem., Ravenshaw Coll., Cuttack, 753 003, India
 SOURCE: Macromol. Rep. (1994), A31(Suppl. 1-2), 53-61
 CODEN: MREPEG
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB **Resins** were synthesized by reacting p-hydroxyacetophenone **semicarbazone** with substituted benzoic acid and formaldehyde. Acid catalysts (H₂SO₄, HCl and succinic acid) and basic catalysts (NaOH and KOH) were used. The ion-exchange capacity of the acid form of the **resins** was studied by measuring metal uptake from various electrolyte solns. with the **resin** in suspension. The effect of electrolyte compn. and pH on metal uptake of Cu+2, Ni+2, Zn+2, Mg+2, Mn+2 and Co+2 was detd.

L6 ANSWER 20 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1994:622004 CAPLUS
 DOCUMENT NUMBER: 121:222004
 TITLE: Peptide aldehyde analogs as inhibitors of thrombosis
 INVENTOR(S): Vlasuk, George Phillip; Webb, Thomas Roy; Pearson, Daniel Andrew; Abelman, Matthew Mark
 PATENT ASSIGNEE(S): Corvas International, Inc., USA
 SOURCE: PCT Int. Appl., 144 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|--------|------------|-----------------|----------|
| WO 9417817 | A1 | 19940818 | WO 1994-US1612 | 19940214 |
| W: CA, JP RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE | | | | |
| US 5492895 | A | 19960220 | US 1994-195995 | 19940211 |
| EP 684830 | A1 | 19951206 | EP 1994-909628 | 19940214 |
| EP 684830 | B1 | 19990616 | | |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE | | | | |
| JP 08508716 | T2 | 19960917 | JP 1994-517424 | 19940214 |
| PRIORITY APPLN. INFO.: | | | US 1993-17125 | 19930212 |
| | | | US 1994-195995 | 19940211 |
| | | | US 1992-836123 | 19920214 |
| | | | WO 1994-US1612 | 19940214 |
| OTHER SOURCE(S): | MARPAT | 121:222004 | | |
| GI | | | | |



AB Peptide aldehyde analogs I [R₁ = alkyl, alkenyl, aryl, aralkyl, aralkenyl, perfluoroalkyl, trimethylsilylalkyl, etc.; X = CO, O₂C, SO₂, NH₂O₂, OSO₂; R₂ = CO₂R'; tetrazolyl; R' = alkyl, aryl, aralkyl; R₃ = (CH₂)₃NHC(:NH)NH₂; m = 1, 2] that inhibit thrombin or Factor Xa are proposed for preventing or treating conditions in mammals characterized by abnormal thrombosis. Thus, N-(3-phenylpropionyl)-L-aspartyl-L-prolyl-L-argininal (II) (50 or 100 .mu.g/kg/min i.v.) inhibited FeCl₃-induced platelet-dependent arterial thrombosis in rats. II was synthesized by attachment of N-Boc-L-proline to a NG-nitroargininal **semicarbazone**-derivatized **resin**, followed by attachment of N-Boc-L-aspartic acid .beta.-benzyl ester, deprotection, and coupling to 3-phenylpropionic acid.

L6 ANSWER 21 OF 45 CAPLUS COPYRIGHT 2001 ACS

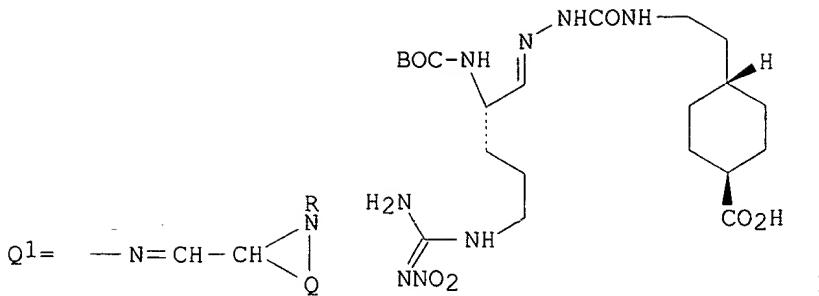
ACCESSION NUMBER: 1994:606648 CAPLUS
 DOCUMENT NUMBER: 121:206648
 TITLE: Synthetic **resins**. Part 31. Thermal properties of **resin** copolymers derived from **semicarbazone** of 4-hydroxyacetophenone-furfural-substituted benzoic acids
 AUTHOR(S): Mohapatra, N. K.; Lenka, S.; Nayak, P. L.
 CORPORATE SOURCE: Laboratory of Polymers and Fibers, Department of Chemistry, Ravenshaw College, Cuttack-753003, Orissa, India
 SOURCE: Thermochim. Acta (1994), 241(1-2), 51-6
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB Phenolic **resins** are obtained from the **semicarbazone** deriv. of 4-hydroxyacetophenone, furfural, and substituted benzoic acids in the presence of an acid catalyst. The structure of the repeat units of the copolymer are ascertained from the IR spectra. The TGA of some copolymers is studied. The kinetic parameters of the thermal degrdn. are evaluated using five different methods. A degrdn. mechanism is suggested.

L6 ANSWER 22 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:580233 CAPLUS
 DOCUMENT NUMBER: 121:180233
 TITLE: Reagents for automated synthesis of peptide aldehydes.
 INVENTOR(S): Webb, Thomas R.
 PATENT ASSIGNEE(S): Corvas, Inc., USA
 SOURCE: U.S., 18 pp.
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|-------------------|----------|-----------------|----------|
| US 5283293 | A | 19940201 | US 1990-627753 | 19901214 |
| US 5367072 | A | 19941122 | US 1991-807474 | 19911213 |
| PRIORITY APPLN. INFO.: | | | US 1990-627753 | 19901214 |
| OTHER SOURCE(S): | MARPAT 121:180233 | | | |



AB XCOANHCONHZ [A = hydrocarbyl; Z = NHR, N:CHCHR₁NHR, Q₁; R = protecting group; R₁ = H, (substituted) alkyl, cycloalkyl, aryl, aralkyl; Q = (substituted) alkylene; X = NHSp, OSP, CH₂Sp; Sp = insol. resin support], were prepd. Thus, nitroarginine **semicarbazone** deriv I was prepd. and coupled to methylbenzhydrylamine **resin**; the **resin** was used in solid phase prepn. of BOC-D-Leu-Pro-Arginal, etc.

L6 ANSWER 23 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1994:135141 CAPLUS

DOCUMENT NUMBER: 120:135141

TITLE: Preparation of **semicarbazone** and semicarbazide amino acid aldehyde supports for automated synthesis of peptide analogs

INVENTOR(S): Webb, Thomas Roy

PATENT ASSIGNEE(S): Corvas International Inc., USA

SOURCE: PCT Int. Appl., 65 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

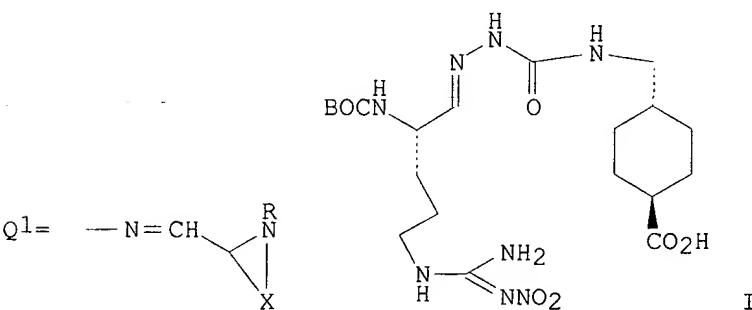
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| WO 9312076 | A1 | 19930624 | WO 1991-US9388 | 19911213 |
| W: AU, CA, FI, JP, KR, NO RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE | | | | |
| AU 9213390 | A1 | 19930719 | AU 1992-13390 | 19911213 |
| PRIORITY APPLN. INFO.: | | | WO 1991-US9388 | 19911213 |
| OTHER SOURCE(S): MARPAT 120:135141 | | | | |

GI



AB HO₂CACH₂NHCONHZ [A = C₂-15 hydrocarbylene; Z = NHR, N:CHCHR₁NHR, Q₁; R = protecting group; R₁ = H, (substituted) alkyl, cycloalkyl, aryl, aralkyl; X = (substituted) C₃-12 alkylene], were prep'd. Thus, trans-4-aminomethylcyclohexanecarboxylic acid was elaborated to **semicarbazone** deriv I in several steps. This was coupled to methylbenzhydrylamine **resin** using N-methylmorpholine/BOP reagent in DMF and the resulting SAAA (**semicarbazone** amino acid aldehyde) support was used to prep. BOC-D-Leu-Pro-Arg-H, BOC-D-Phe-Pro-Arg-H, etc.

L6 ANSWER 24 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1993:659616 CAPLUS
 DOCUMENT NUMBER: 119:259616
 TITLE: Reversible thermal recording materials providing stable transparent state in wider range of temperature
 INVENTOR(S): Azuma, Hiroshi
 PATENT ASSIGNEE(S): Mitsubishi Plastics Ind, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|-------------|------|----------|-----------------|----------|
| JP 05193270 | A2 | 19930803 | JP 1992-7998 | 19920121 |

AB The title materials comprising org. low-mol.-wt. substances dispersed in a **resin**, the transparency of which changes reversibly with temp., employ .gtoreq.1 compd. selected from C.gtoreq.10 alicyclic ketones and oximes and **semicarbazones** derived from them and .gtoreq.1 C.gtoreq.12 aliph. satd. dicarboxylic acid as the org. substances. The materials become transparent in a wide range of temp. Thus, a PET substrate with a magnetic recording layer on the back side was coated with a compn. contg. MRP-TS (vinyl chloride-vinyl acetate copolymer), cycloelicosane, and 1,14-tetradecanedioic acid and laminated with a PET film to give a reversible thermal recording card.

L6 ANSWER 25 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1993:116241 CAPLUS
 DOCUMENT NUMBER: 118:116241
 TITLE: Biomedical Polymers. IV. Bactericidal property of the **resins** derived from **semicarbazones** and 2,4-dinitrophenylhydrazones of some hydroxyacetophenones
 AUTHOR(S): Bastia, T. K.; Senapati, M.; Nayak, P. L.
 CORPORATE SOURCE: Dep. Chem., S.S.D. Coll., Cuttack, 754029, India
 SOURCE: J. Appl. Polym. Sci. (1992), 46(10), 1875-7
 CODEN: JAPNAB; ISSN: 0021-8995
 DOCUMENT TYPE: Journal
 LANGUAGE: English

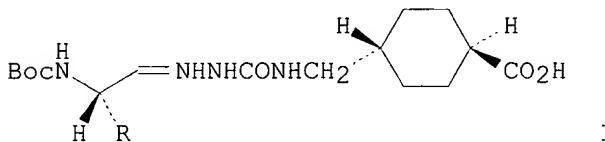
AB Phenols have been extensively studied for their antimicrobial activities and found to be effective eradicants. The present study reports the bactericidal properties of the **resins** derived from hydroxyacetophenone **semicarbazones** and 2,4-dinitrophenylhydrazones. Resacetophenone **semicarbazone** -p-aminobenzoic acid-HCHO copolymer was the most active of all the copolymers tested, showing toxicity to Klebsiella, Staphylococcus citreus, and Proteus at 5% concns.

L6 ANSWER 26 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1992:652705 CAPLUS
 DOCUMENT NUMBER: 117:252705

TITLE: Synthetic resins. XX. Chelation
 ion-exchange properties of resins derived
 from semicarbazone of 2-hydroxyacetophenone-
 substituted benzoic acid-formaldehyde
 AUTHOR(S): Bastia, T. K.; Lenka, S.; Nayak, P. L.
 CORPORATE SOURCE: Dep. Chem., Ravenshaw Coll., Cuttack, 753 003, India
 SOURCE: J. Appl. Polym. Sci. (1992), 46(4), 739-44
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A no. of resins were synthesized by reacting
 o-hydroxyacetophenone semicarbazone with substituted BzOH and
 HCHO in the presence of some acid and basic catalysts. The physicochem.
 properties of the resins were reported. The ion exchange
 properties of the resins were investigated. Influence of
 electrolytes on the metal uptake of Cu²⁺, Ni²⁺, Zn²⁺, Mg²⁺, and Mn²⁺ was
 studied. The distribution of metal ions at different pH was also
 reported.

L6 ANSWER 27 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1992:194851 CAPLUS
 DOCUMENT NUMBER: 116:194851
 TITLE: Automated synthesis of peptide C-terminal aldehydes
 AUTHOR(S): Murphy, Aileen M.; Dagnino, Raymond, Jr.; Vallar,
 Pureza L.; Trippe, Anthony J.; Sherman, Shannon L.;
 Lumpkin, Richard H.; Tamura, Susan Y.; Webb, Thomas R.
 CORPORATE SOURCE: Corvas Int. Inc., San Diego, CA, 92121, USA
 SOURCE: J. Am. Chem. Soc. (1992), 114(8), 3156-7
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 GI



AB The title compds., e.g. Boc-D-Leu-X-Arg-H (Boc = Me₃CO₂C; X = Pro, Ser)
 and Boc-Ala-Ala-Pro-X₁-H (X₁ = Ala, Val, Phe) were prep'd. by the solid
 phase method using linkers I [R = (protected) amino acid side chain].
 Peptides are assembled using std. Boc protocols, and cleaved from the
 resin with dil. aq. acid/formaldehyde to give protected peptide
 C-terminal aldehydes. Argininal-contg. peptide aldehydes with various
 hydrogen/Pd labile protecting groups can be deprotected in a single step
 to give the unprotected peptide aldehydes after purifn. by reverse-phase
 HPLC.

L6 ANSWER 28 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1991:63786 CAPLUS
 DOCUMENT NUMBER: 114:63786
 TITLE: Adhesive compositions
 INVENTOR(S): Kroyan, S. A.; Karapetyan, A. N.; Beglaryan, A. A.;
 Naujokajtiene, D.; Epishkin, Yu. S.; Jasinaivicius, R.
 PATENT ASSIGNEE(S): USSR
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret. 1990, (24), 92.
 DOCUMENT TYPE: Patent
 LANGUAGE: Russian
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|----------|-----------------|----------|
| SU 1574618 | A1 | 19900630 | SU 1988-4485035 | 19880704 |

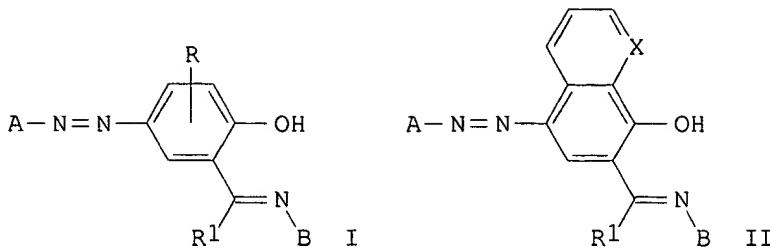
AB An adhesive compn. contg. dian epoxy **resin**, dicyandiamide (I), and solvent has increased strength of bonding permalloy units of cores of Sendust magnetic heads and shortened hardening period by adding N,N-dimethyl-N'-(3-trifluoromethylphenyl)urea (II) and **semicarbazone** 5-nitrofurfural (III). Thus, a compn. contained dian epoxy **resin** 19.5-35.1, I 1.2-5.5, II 0.3-0.8, III 0.1-0.5, and solvent 58.1-78.9%.

L6 ANSWER 29 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1988:93803 CAPLUS
 DOCUMENT NUMBER: 108:93803
 TITLE: A simple, efficient, and highly selective method for the regeneration of carbonyl compounds from oximes and **semicarbazones**
 AUTHOR(S): Ranu, Brindaban C.; Sarkar, Dipak C.
 CORPORATE SOURCE: Dep. Org. Chem., Indian Assoc. Cultiv. Sci., Calcutta, 700 032, India
 SOURCE: J. Org. Chem. (1988), 53(4), 878-9
 CODEN: JOCEAH; ISSN: 0022-3263
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 108:93803
 AB Cation exchange **resin** Dowex-50 is an effective reagent for the title regeneration of carbonyl compds. The method involved heating the oxime or **semicarbazone** at reflux with stirring in an aq. suspension at Dowex-50. The procedure shows a considerable selectivity for the regeneration of ketones over aldehydes.

L6 ANSWER 30 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1986:610401 CAPLUS
 DOCUMENT NUMBER: 105:210401
 TITLE: Metal complexes and their use in dyeing high-molecular-weight organic materials
 INVENTOR(S): Cseh, Georg; Lienhard, Paul
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G. , Switz.
 SOURCE: Eur. Pat. Appl., 40 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|--|------|----------|-----------------|----------|
| EP 168343 | A2 | 19860115 | EP 1985-810270 | 19850610 |
| EP 168343 | A3 | 19881019 | | |
| EP 168343 | B1 | 19910502 | | |
| R: CH, DE, FR, GB, IT, LI | | | | |
| US 4670486 | A | 19870602 | US 1985-745034 | 19850613 |
| JP 61012756 | A2 | 19860121 | JP 1985-130651 | 19850615 |
| US 4775747 | A | 19881004 | US 1987-15815 | 19870217 |
| PRIORITY APPLN. INFO.: CH 1984-2915 19840615 | | | | |
| US 1985-745034 19850613 | | | | |

GI



AB Divalent transition metal complexes of I and II [A = arom. residue; B = H, C1-4 alkyl, NHCONH2, NHCONHR2, NHCONHR3, NHCSNH2, NHCONHR3, NHCSR3, NHC(:NH)NH2, NHR3, NHCOR3, NHSO2R3, or a heterocyclic arom. residue; R = H, halogen, C1-4 alkyl, C1-4 alkoxy; R1 = H, C1-4 alkyl, (un)substituted aryl; R2 = C1-4 alkyl; R3 = (un)substituted phenyl; X = CH, N] are useful in dyeing polymers such as nitrocellulose, alkyd, melamine, formaldehyde-urea, and acrylic **resins**. Thus, 5-(2,5-dichlorophenylazo)-2-hydroxybenzaldehyde **semicarbazone** was dissolved in Et Cellosolve and treated with Cu(OAc)2, forming a 1:1 Cu complex of I (A = 2,5-C12C6H3, B = NHCONH2, R = R1 = H).

L6 ANSWER 31 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1984:47542 CAPLUS

DOCUMENT NUMBER: 100:47542

TITLE: Transition-state affinity chromatography of trypsin-like proteinases with dipeptidyl argininal ligands

AUTHOR(S): Patel, Arun H.; Ahsan, Ahmad; Suthar, B. P.; Schultz, Richard M.

CORPORATE SOURCE: Stritch Sch. Med., Loyola Univ. Chicago, Maywood, IL, 60153, USA

SOURCE: Biochim. Biophys. Acta (1983), 748(2), 321-30
CODEN: BBACAO; ISSN: 0006-3002

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Dipeptidyl argininal (arginine aldehyde) affinity **resins** of general formula R-(X-Y-argininal) (where R = **resin** matrix and X, Y = amino acids of varied structure) are synthesized in a solid-phase procedure in which the dipeptide (-X-Y-) is 1st attached to the **resin**, followed by the joining of the Y amino acid to argininal **semicarbazone**, and decomprn. of the **semicarbazone** in a MeOH/HOAc/HCHO reagent. An R-(Gly-Gly-argininal) **resin** binds urokinase tightly, but does not bind thrombin. However, thrombin binds strongly to R-(Phe-Pro-argininal), whereas urokinase does not bind. Accordingly, the X-Y-argininal ligands selectively bind proteinases of identical primary binding site specificity to arginine, but different secondary site specificity in -X-Y-. The selectivity is due to an amplification of peptide binding specificity caused by the transition-state analog properties of the ligands. Whereas the affinity consts. between peptide aldehyde and proteinase approach those of antibody-antigen interactions, the elution with semicarbazide (aldehyde-trapping reagent) buffers easily remove tightly bound proteinases without proteinase inhibitors or denaturation. Conditions for the binding and elution of proteinases, methods of regeneration, and other characteristics of the **resins** are described.

L6 ANSWER 32 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1983:486778 CAPLUS

DOCUMENT NUMBER: 99:86778

TITLE: Identification of betanin degradation products
AUTHOR(S): Schwartz, Steven J.; Von Elbe, Joachim H.

CORPORATE SOURCE: Dep. Food Sci., Univ. Wisconsin, Madison, WI, 53706,

SOURCE: USA
Z. Lebensm.-Unters. Forsch. (1983), 176(6), 448-53
CODEN: ZLUFAR; ISSN: 0044-3026
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Betanin [7659-95-2] in soln., upon heating, was hydrolyzed to betalamic acid [18766-66-0] and cyclodopa-5-O-glycoside [71242-23-4]. This reaction was monitored by an anal. high performance liq. chromatog. (HPLC) method. The products were isolated by preparative reversed-phase HPLC or column chromatog. using anion-exchange **resins**. Derivs. of betalamic acid (anilide, **semicarbazone**, condensation with L-proline) and cyclodopa-5-O-glycoside (hexaacetate) were prep'd. as evidence to support the identification of these decompn. compds. Formation of decarboxylated betanin was proposed based on the identification of CO₂, chromatog. properties, and the light absorption characteristics of the decarboxylated product.

L6 ANSWER 33 OF 45 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1982:138603 CAPLUS
DOCUMENT NUMBER: 96:138603
TITLE: Transition-state affinity purification of proteases; the preparation of an argininal affinity **resin** for the selective binding of trypsin-like proteases
AUTHOR(S): Patel, Arun H.; Schultz, Richard M.
CORPORATE SOURCE: Stritch Sch. Med., Loyola Univ., Maywood, IL, 60153, USA
SOURCE: Biochem. Biophys. Res. Commun. (1982), 104(1), 181-6
CODEN: BBRCA9; ISSN: 0006-291X

DOCUMENT TYPE: Journal
LANGUAGE: English
AB An affinity **resin** contg. argininal ligands is synthesized for the purifn. of proteases with trypsin-like specificity. The synthesis of arginine **semicarbazone** (Argal-SC) from Cbz-(.omega.-nitro)-L-arginine, the joining of Argal-SC to an agarose matrix, and the removal of the **semicarbazone** function to form argininal is described. Argininal binds proteases by forming a hemiacetal with the serine nucleophile of the protease with high specificity due to the transition-state like features of the adduct. Thus, the **resin** binds trypsin more strongly than **resins** that only assoc. by noncovalent interactions. The trypsin is eluted in quant. yield by a semicarbazide contg. buffer.

L6 ANSWER 34 OF 45 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1980:508138 CAPLUS
DOCUMENT NUMBER: 93:108138
TITLE: Simultaneous determination of cycasin, methylazoxymethanol and formaldehyde by high performance liquid chromatography
AUTHOR(S): Yagi, Fumio; Tadera, Kenjiro; Kobayashi, Akira
CORPORATE SOURCE: Fac. Agric., Kagoshima Univ., Kagoshima, 890, Japan
SOURCE: Agric. Biol. Chem. (1980), 44(6), 1423-5
CODEN: ABCHA6; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Cycasin (I) [14901-08-7], myethylazoxymethanol (II) [590-96-5], and HCHO [50-00-0] were detd. simultaneously in the cycad plant, Cycas revolute, by high-performance liq. chromatog. (HPLC). The .beta.-glucosidase present in the plant exts. was inactivated by 2 methods: (a) boiling in EtOH, or (b) freezing at less than -30.degree. prior to homogenization in cold EtOH. HPLC was performed on a 0.5 x 600 mm Teflon column packed with Shodex HC 125S **resin** (12.5 .mu.m). HCHO was detd. as its **semicarbazone** deriv. after dilg. the sample ext. with semicarbazide-HCl, and both I and II were detd. at their max. absorption wavelength of 215 nm. HPLC of seed kernel exts. obtained by the boiling

method showed good sepn. of I, II, and the **semicarbazone** of HCHO. When the ext. was treated with almond .beta.-glucosidase, I was hydrolyzed completely, and II and the **semicarbazone** of HCHO increased. The amts. of I obtained by the boiling method were lower than those obtained by freezing, due to incomplete inactivation of .beta.-glucosidase by boiling. Thus, freezing is the method of choice for inactivating .beta.-glucosidase prior to HPLC.

L6 ANSWER 35 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1970:111639 CAPLUS

DOCUMENT NUMBER: 72:111639

TITLE: Araucaria cunninghamii diterpenes.

AUTHOR(S): Caputo, Romualdo; Dovinola, V.; Mangoni, Lorenzo

CORPORATE SOURCE: Ist. Chim. Org., Univ. Napoli, Naples, Italy

SOURCE: Chim. Ind. (Milan) (1969), 51(12), 1383-4

CODEN: CINMAB

DOCUMENT TYPE: Journal

LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

AB The following compds. were isolated from the A. cunninghamii **resin**: I (Arya, V. P., 1961), II (R = CO₂H, R₁ = H) (Mangoni, L. and Belardini, M., 1964), 15-hydroxy-8,13-labdadien-19-oic acid (III, R = CO₂H, R₁ = H), m. 124-5.degree., [.alpha.]D 128.degree., II (R = CO₂H, R₁ = Ac), [.alpha.]D 49.degree., III (R = CO₂H, R₁ = Ac), [.alpha.]D 109.degree., III (R = CH₂OH, R₁ = H), m. 141-3.degree., [.alpha.]D 54.degree., III (R = CHO, R₁ = H), [.alpha.]D 68.degree., III (R = CHO, R₁ = Ac), [.alpha.]D 67.degree. (**semicarbazone** m. 126-8.degree., [.alpha.]D 58.degree.) and the mono and diacetate of III (R = CH₂OH, R₁ = H), [.alpha.]D 51.degree., and [.alpha.]D 49.degree., resp. The treatment of III (R = CO₂H, R₁ = H) with CH₂N₂ gave III (R = CO₂Me, R₁ = H), [.alpha.]D 124.degree., which upon catalytic hydrogenation gave a tetrahydro deriv., b. 160.degree., [.alpha.]D 50.degree.. NMR spectra are given.

L6 ANSWER 36 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1970:61441 CAPLUS

DOCUMENT NUMBER: 72:61441

TITLE: Photochromic imaging system

INVENTOR(S): Amidon, Alan B.; Brynko, Carl

PATENT ASSIGNEE(S): Xerox Corp.

SOURCE: U.S., 6 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|------|----------|-----------------|----------|
| US 3482973 | A | 19691209 | US 1965-491940 | 19651001 |
| GB 1166240 | A | 19691008 | GB 1966-1166240 | 19660927 |
| PRIORITY APPLN. INFO.: | | | US 1965-491940 | 19651001 |
| AB 6'-Nitro-1,3,3-tri-methylindolinobenzopyrylospiran 4 and Amberol ST-13 7X 8 g (an unreactive, unmodified phenol-formaldehyde resin) are dissolved in 88 g PhMe. This soln. is dip coated in the dark to a thickness of 2 .mu. on an Al plate and air dried. The plate is then contact exposed to an image transparency with a 9-W fluorescent light using a filter which passes about a 10 .ANG. bandwidth centered on 3660 .ANG.. A maroon colored image is formed. The film is then treated with xylene vapor to swell the image areas. On drying the exposed areas become fixed and the image areas are swollen about 1/3 above the thickness of the layers, giving a raised appearance of the image. Other spiropyrans may be used, as well as anthrones, syndones, anids hydrazones, osayone, semicarbazones , stilbene derivs. fulgides, amino-camphor compds., | | | | |

or thio indigo dyes.

L6 ANSWER 37 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1969:466059 CAPLUS

DOCUMENT NUMBER: 71:66059

TITLE: Photographic imaging by means of the surface tension created by photochromic materials

INVENTOR(S): Amidon, Alan B.; Brynko, Carl

PATENT ASSIGNEE(S): Xerox Corp.

SOURCE: U.S., 7 pp.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
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|------------|---|----------|----------------|----------|
| US 3450530 | A | 19690617 | US 1965-484794 | 19650903 |
|------------|---|----------|----------------|----------|

AB A photochromic compd. with a uniformly deformed light scattering surface is exposed to an image with actinic radiation. After imagewise conversion of at least a portion of the photochromic layer, it is exposed to heat, solvent vapor, or other softening influence and because of the marked differences in surface tension between the 2 states of the same photochromic compd., an image is formed. The photochromic compn. may be composed solely of 1toreq.1 photochromic compd. providing that it has the strength and film forming ability and can hold the initial surface scattering pattern. However, it is usually dispersed or dissolved in solid soln. in a plastic resin. The light scattering surface deformation may include those caused by elec. field forces upon softening of the film known as frost or relief thermoplastic deformation imaging or blush imaging caused by phase sepn. during solvent coating of the film or can merely be pressed into the material surface with a die. Typical compds. are spirobifluorene, anthrones, sydnone, hydrazones, osazones, semicarbazones, stilbene deriv., fulgides, amino-camphor compds., thioindigo dyes, and o-nitrobenzyl derivs. For example, 2 g. 6'-nitro-1,3,3-trimethyl-indolinobenzopyrylospiran and 4 g. of Stabelite Ester 10 resin are dissolved in 94 g. PhMe. This soln. is dip-coated in the dark to a thickness of 1 .mu. on an Al plate and air-dried, and is charged at 8500 v., pos. with respect to the Al base of the plate. The film is heated with a hot air gun, and a uniform fine grain frost deformation pattern appears on the surface. Upon cooling, this uniform thermoplastic deformation pattern is frozen in the film. The film is exposed to an image with a 9-w. Blacklite using a filter which passes about a 10-A. bandwidth centered on 3660 A. A maroon color image forms on the film. The film is exposed to xylene vapor which causes the frost deformation to disappear in the background film areas, reverting to its original smooth condition there while the frost pattern is retained in the exposed areas.

L6 ANSWER 38 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1969:422994 CAPLUS

DOCUMENT NUMBER: 71:22994

TITLE: N-3-Oxohydrocarbon-substituted acrylamide reaction products with compounds containing active hydrogen

INVENTOR(S): Laudise, Michael A.; Coleman, Lester E.

PATENT ASSIGNEE(S): Lubrizol Corp.

SOURCE: Fr., 9 pp.

CODEN: FRXXAK

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|----------|
| FR 1540185 | | 19680920 | US | 19661013 |
| PRIORITY APPLN. INFO.: | | | US | 19670807 |

AB N-(3-Oxohydrocarbon-substituted)acrylamides were prep'd. and reacted with a polyamine or polyamide with terminal amino groups and the products were used in paints. The paints showed less yellowing and improved light stability. Thus, the oxime of diacetone acrylamide was prep'd. by reaction of equimolar amts. of NH₂OH and diacetone acrylamide (I). Similarly, reaction of I with H₂NCONHNH₂.HCl, NaHSO₃, and BuNH₂ gave the **semicarbazone** of I, the bisulfite addn. product of I and diacetone acrylamide-n-butylamine, resp. To a soln. of 0.23 g. Na in 26 g. MeOH was added 68 g. I, the mixt. was stirred 90 hrs., 0.7 g. HOAc was added, the mixt. was filtered, and the filtrate was distd. The fraction b4.cntdot.5 120-50.degree. was redistd. to give N-(1,1-dimethyl-3-oxobutyl)-3-methoxypropionamide. Also prep'd. were the addn. product of I and cellulose, S-[N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]thiuronium chloride (m. 146-9.degree.), N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl n-dodecyl sulfide (m. 53-6.degree.), the dithiophosphate of O,O'-di-iso-Pr S-[N-(1,1-dimethyl-3-oxobutyl)-.beta.-carboamoylethyl], N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl) tert-Bu sulfide (m. 76-8.degree.), N-[N'-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]piperidine, N-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl-.beta.-naphthyl sulfide, N-[N'-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]morpholine, and N-[N'-(1,1-dimethyl-3-oxobutyl)-.beta.-carbamoylethyl]-pyridinium chloride. I (169 g.) was heated at 66.degree. under N, 51.5 g. diethylenetriamine (II) was added dropwise, and the mixt. was heated for 1 hr. at 77.degree. to give a reaction product (III) of I and II. I was also reacted with Versamid 125 (a liq. polyamide with terminal amino groups). Other amines used in place of II were ethylenediamine, tetraethylenepentamine, phenylenediamine, aminoethylpiperazine, diaminodiphenylsulfone, and dicyandiamide. Diacetone methacrylamide was similarly reacted with II. To a paint compn. (IV) contg. TiO₂ 500, bisphenol A-epichlorohydrin **resin** 500, iso-BuCOMe 167, xylene 167, and EtOCH₂CH₂OH 166 parts, was added 25.7 parts III. A coating 25.4-38.1 .mu. thick was spread on Al panels, the panels were dried, and the brilliance after 500 hrs. was 82-5 in a Fade-O-Meter and the yellowing was 0.0234 compared with 18-23 in a Fade-O-Meter and a yellowing of 0.0458 when 6 parts II was added to IV.

L6 ANSWER 39 OF 45 CAPLUS COPYRIGHT 2001 ACS
 ACCESSION NUMBER: 1969:37271 CAPLUS
 DOCUMENT NUMBER: 70:37271
 TITLE: Synthesis and study of compounds with the bicyclo[3.3.1]nonane structure
 AUTHOR(S): Parrera Casanovas, Carlos
 SOURCE: Rev. Real Acad. Cienc. Exactas, Fis. Natur. Madrid (1968), 62(2), 413-83
 CODEN: RCFNAT

DOCUMENT TYPE: Journal
 LANGUAGE: Spanish

GI For diagram(s), see printed CA Issue.

AB 2,2'-Methylenebis (cyclohexanone) (I) was prep'd. by reaction of 35-40% HCHO with cyclohexanone catalyzed by alc. KOH at 100.degree., yield 65-70%. I, m. 58.degree., cyclized intramol. with NaOMe catalyst to furnish 2-hydroxytricyclo[7.3.-1.02,7]tridecan-13-one (II), m. 178.degree., **semicarbazone** m. 197-8.degree.. Reactions of II are of interest because they may be considered models of the reductive dimer of pulegone. II is unaltered by treatment with HCl-pyridine or I in C₆H₆. Br in CCl₄ yielded a **resin** so unstable it was not further studied. I2 in toluene gave a complex mixt. of 6 compds. while redn. with LiAlH₄ gave a diol (III), m. 174-6.degree., probably mainly the diaxial epimer. Dehydration of II with an equal wt. of p-MeC₆H₄-SO₃H in MeOH gave

a yellow liq. (IV), b13 142-5.degree., but catalytic dehydration gave a mixt. of 9 compds. Dehydrogenation with S at 220-30.degree. gave a white solid, m. 101-2.degree., identified as xanthene, and a yellow phenolic oil, probably 9-hydroxyxanthene, confirmed by synthesis from Ph salicylate. Pt-C dehydrogenation gave a white solid, m. 78.degree., which was 1,2,3,-4,4a,9a-hexahydroxyxanthene, a colorless oil contg. dehydration products, and a yellow oil which contd. 2-hydroxydi-phenylmethane. A new route involving enamines to Et 9-oxobicyclo[3.3.1]non-3-en-2-carboxylate (V) was designed. The pyrrolidine enamine of Et 2-oxocyclohexanecarboxylate was condensed with acrolein in the presence of EtONa at -60.degree. to give 50% .beta.- (1-carbethoxy-2-oxocyclohexyl)propionaldehyde (VI), b0.8 125-30.degree., n 1.472. VI was dehydrated by dropwise addn. to conc. H2SO4 yielding 63% V, b1 112.degree., m. 50-51.degree.. Sapon. of V with KOH followed by HCl gave 75% 9-oxobicyclo[3.3.1]non-3-en-1-carboxylic acid (VII), m. 134-5.degree.. Redn. of VII with H over PtO2 gave 96% VIII, m. 122-3.degree.. CrO3 in AcOH oxidized VIII to 37% IX, m. 136-7.degree.. A satd. soln of IX in MeOH was neutralized with alc. KOH, AgNO3 added and the Ag salt recovered and treated with Br in CCl4 to furnish 1-bromobicyclo[3.3.1]-nonan-9-one, m. 59-60.degree., but most of the product was unchanged IX. VIII was methylated with CH2N2 to give VIIIa which could be sapon. to regenerate the acid. VIIIa was treated with BzCl to give colorless crystals, m. 70-71.degree.. VIII was acetylated with Ac2O to give the acetate, m. 130-131.degree.. Reaction of BzCl with VIII in pyridine gave X, m. 104-5.degree., and a monobenzoyl deriv. m. 118-19.degree.. Re-fluxing X with MeOH 1 hr. gave the anhydride m. 157-8.degree., of 9-benzyloxybicyclo[3.3.1]nonane-1-carboxylic acid. Redn. of VII with LiAlH4 in Et2O gave 99% 1-hydroxymethylbicyclo-[3.3.1]non-3-en-9-ol (XI), m. 54-61.degree.. XI was resolved by silica gel chromatog. into 2 epimers, syn-XI, m. 96-7.degree., and anti-XI, m. 74.5-75.5.degree., 3,5-dinitrobenzoate m. 135-6.degree.. Hydrogenation of XI over Pt oxide gave 91% XII, m. 97.degree., 3,5-dinitrobenzoate m. 137.degree.. Tosylation of XI in pyridine gave mainly monotosylated derivs. which could be resolved by thin-layer silica gel chromatog. into the syn-epimer (XIII) and the anti-epimer (XIV). LiAlH4 in Et2O redn. of XIV to an oily yellow liq. which on elution with C6H14 from a silica gel column gave 1,5-dimethylcyclooctane (XV), and anti-1-methylbicyclo[3.3.1]-non-3-en-9-ol, 3,5-dinitrobenzoate m. 153-4.degree., p-nitrobenzoate m. 95.degree. (EtOH). Similarly, LiAlH4 redn. of XIII gave syn-1-methylbicyclo[3.3.1]non-3-en-9-ol, m. 23-7.degree., 3,5-dinitrobenzoate m. 186-7.degree.. The ir and N.M.R. spectra of II-IV, VII, VIII, XII-XV are reported.

L6 ANSWER 40 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1969:35043 CAPLUS

DOCUMENT NUMBER: 70:35043

TITLE: High-boiling neutral compounds from the oleoresin of Pinus silvestris

AUTHOR(S): Shmidt, E. N.; Pentegova, V. A.

CORPORATE SOURCE: Novosibirsk. Inst. Org. Khim., Novosibirsk, USSR

SOURCE: Izv. Sib. Otd. Akad. Nauk SSSR, Ser. Khim. Nauk (1968), (4), 144-6

CODEN: IZSKAB

DOCUMENT TYPE: Journal

LANGUAGE: Russian

AB The neutral fraction prep'd. by sapon. of P. silvestris resin was fractionated in vacuo and the diterpene fraction (200 g.) was chromatographed on basic Al2O3, petroleum ether, and EtOH being used for elution. Thin-layer chromatog. on SiO2 with AgNO3 (5%) was then used to isolate the following compds.: pimaradiene, n20D 1.5270, [.alpha.]20D +92.degree.; dehydroabietinal, m. 50-1.degree., [.alpha.]20D + 50.degree. (CHCl3) (**semicarbazone** m. 218-21.degree.); abietinal, n20D 1.5304, [.alpha.]20D -53.1.degree. (CHCl3, c 2.0); pimarinal, m. 51-2.degree., [.alpha.]20D + 87.degree. (CHCl3, c 2.0); isopimarinal,

n20D 1.5283, [.alpha.]20D -11.2.degree. (CHCl₃, c 2.0); pimarinol, m. 85-6.degree., [.alpha.]20D +83.degree. (CHCl₃); abietinol, m. 83-4.degree., [.alpha.]20D -94.degree.; isopimarinol, m. 81-2.degree., [.alpha.]20D -17.degree. (CHCl₃, c 2.0).

L6 ANSWER 41 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1968:13197 CAPLUS

DOCUMENT NUMBER: 68:13197

TITLE: Components of *Cupressus sempervirens resin.*

IV. Total Synthesis of (.-.)-sempervirol

AUTHOR(S): Caputo, Romualdo; Mangoni, Lorenzo

CORPORATE SOURCE: Univ. Naples, Naples, Italy

SOURCE: Gazz. Chim. Ital. (1967), 97(6), 920-34

CODEN: GCITA9

DOCUMENT TYPE: Journal

LANGUAGE: Italian

GI For diagram(s), see printed CA Issue.

AB (.-.)-Sempervirol (I, R = H) (II) was prep'd. by a synthesis which involves the prepn. of III, IV, and V. Thus, 100 g. p-iso-PrC₆H₄COCH₂CH₂CO₂H, treated with 320 ml. fuming HNO₃ and 280 ml. concd. H₂SO₄ gave 90% 4,3-iso-Pr(O₂N)C₆H₃COCH₂CH₂CO₂H (VI), m. 133-4.degree. (C₆H₆); **semicarbazone** m. 187-8.degree. (decompn.) (EtOH). VI (100 g.) in 400 ml. 5% MeOH hydrogenated over 10 g. Raney Ni and the product treated with 12N H₂SO₄ gave 74% .gamma.- (4-isopropyl-3-aminophenyl)-.gamma.-butyrolactone (VII), m. 124-5.degree. (EtOH); acetyl deriv. m. 126-7.degree. (C₆H₆-ligroine). A soln. of 50 g. VII in 450 ml. dil. H₂SO₄ cooled to 0.degree., treated with 16 g. NaNO₂, and treated at 50.degree. with 450 ml. dil. H₂SO₄ gave 75% .gamma.- (4-isopropyl-3-hydroxyphenyl)-.gamma.-butyrolactone (VIII), m. 114-15.degree. (ligroine-C₆H₆); acetate m. 78-9.degree. (ligroine). VIII (35 g.) in 200 ml. 95% EtOH hydrogenated 10 hrs. in the presence of 3 g. W7 Raney Ni gave 85% 4,3-iso-Pr(HO)C₆H₃(CH₂)₃CO₂H (IX); benzoate m. 120-1.degree. (ligroine). IX (32 g.) in 50 ml. 15% NaOH treated with 17 ml. Me₂SO₄ gave 95% 4,3-iso-Pr(MeO)C₆H₃(CH₂)₃CO₂H (X), p-phenylphenacyl ester m. 91-2.degree. (ligroine). A soln. of 32 g. X treated with 21 ml. Et₃N and the mixt. cooled to <0.degree., slowly treated with 14 ml. ClCO₂Et at <0.degree., agitated 15 min., slowly treated at <10.degree. with 47 g. AlCl₃, kept overnight, and hydrolyzed gave 66% 6-methoxy-7-isopropyl-1-tetralone (XI), m. 58-60.degree. (ligroine); **semicarbazone** m. 210-13.degree. (decompn.) (EtOH). XI (17 g.) treated with MeMgI (prep'd. from 4.3 g. Mg and 12.5 ml. MeI) gave 90% 1-methyl-6-methoxy-7-isopropyl-3,4-dihydronaphthalene (XII), b_{0.05} 121-3.degree., n_{25D} 1.555. A soln. of 15 g. XII in CHCl₃ treated with 10 g. BzOOH in 250 ml. CHCl₃ and the mixt. kept 48 hrs. at -5.degree. gave 7.3 g. 1-methyl-6-methoxy-7-isopropyl-2-tetralone (XIII), m. 85-6.degree. (ligroine) [**semicarbazone** m. 173-5.degree. (EtOH)], and 8 mg. 7-isopropyl-6-methoxy-1-methylene-2-tetralol, m. 62-3.degree. (ligroine). 1-Hydroxy-1-methyl-7-isopropyl-6-methoxy-2-tetralone (6 g.) treated with excess LiAlH₄ gave 3 g. 1-methyl-7-isopropyl-6-methoxyl,2-tetralin-diol, m. 130-1.degree., which is treated with 50 ml. 1:4 concd. H₂SO₄-EtOH to give XIII, m. 85-6.degree. (ligroine). A mixt. of 8 g. XIII and 2 g. NaH (50% in paraffin) in 200 ml. ligroine treated under N with 4 ml. EtCOCH₂CH₂Cl, the mixt. refluxed 15 min. and cooled, 2 g. NaH added, and the mixt. refluxed 1 hr. gave 5.5 g. III, **semicarbazone** m. 60-2.degree.. III (5 g.) slowly added to a soln. of 2.5 g. K in 100 ml. tert-BuOH, 8 ml. MeI added, and the mixt. kept under N 2 hrs. and refluxed 0.5 hr. gave 4 g. IV [2,4-dinitrophenylhydrazone m. 228-9.degree. (EtOAc)], which, treated with 500 ml. Me₂CO, 15 ml. concd. HCl, and 20 g. SnCl₂ regenerated 85% IV, m. 92-3.degree. (hexane). IV (2 g.) in 30 ml. HOAc hydrogenated over 1 g. 10% Pd-C gave 1.5 g. V, m. 86-8.degree.; **semicarbazone** m. 83-5.degree.. A mixt. of 1 g. V, 18 ml. 15% HCl, and 18 g. Zn amalgam (prep'd. from 18 g. Zn and a soln. of 1.8 g. HgCl₂ and 1.2 ml. concd. HCl in 18 ml. water) refluxed 45 hrs. and 3 ml. concd. HCl added every 6 hrs. gave 75% I (R = Me), m. 60-1.degree. (ligroine). A mixt. of 500 mg. I (R

= Me), 10 ml. HOAc, and 10 ml. 48% HBr refluxed under N 7 hrs. gave 280 mg. II, b1 180.degree.. A mixt. of 100 mg. II, Ac2O, and NaOAc refluxed 2 hrs. gave (.+-.)-sempervirol acetate, m. 90-1.5.degree. (MeOH). N.M.R. ir, and uv data are given.

L6 ANSWER 42 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1968:13196 CAPLUS

DOCUMENT NUMBER: 68:13196

TITLE: Components of *Cupressus sempervirens resin*.

III. Isolation and structure of sempervirol, a new diterpene phenol

AUTHOR(S): Mangoni, Lorenzo; Caputo, Romualdo

CORPORATE SOURCE: Univ. Naples, nPles, Italy

SOURCE: Gazz. Chim. Ital. (1967), 97(6), 908-19

CODEN: GCITA9

DOCUMENT TYPE: Journal

LANGUAGE: Italian

AB Compds. of the general formulas I and II are isolated and used in the prepn. of compds. of the general formulas II and III. The structure, I (R = H, R1 = OH, R2 = iso-Pr), is assigned to sempervirol (IV). The neutral fraction (isolated C. sempervirens resin) (7.200 g.) chromatographed on Al2O3, gave mixts. A-H. All mixts. were chromatographed on SiO2. Mixt. B gave 2.6 g. totarol (I, R = iso-Pr, R1 = OH, R2 = H), m. 126-7.degree., [alpha.]D 41.degree. (c 1) [benzoate m. 145-6.degree., [alpha.]D 43.5.degree. (c 0.7, CHCl3)]; and 200 mg. manool [II, R = Me, R1 = (CH2)2C(CH:CH2)(OH)Me] [3,5-dinitrobenzoate m. 103-4.5.degree., [alpha.]D 8.8.degree. (CHCl3)]. Mixt. C gave 130 mg. oil, ferruginol (I, R = H, R1 = iso-Pr, R2 = OH). The oil (100 mg.) treated with 2 ml. Ac2O and 30 mg. NaOAc gave ferruginyl acetate. Ferruginyl acetate (62 mg.), treated with CrO3 in HOAc, gave a mixt. of 6 mg. 7-oxoacetyltarol (III, R = iso-Pr, R1 = AcO, R2 = H), m. 167-9.degree., and 50 mg. 7-oxoacetylferuginol (III, R = H, R1 = iso-Pr, R2 = AcO), m. 163-5.5.degree., [alpha.]D 26.8.degree. (c 0.5, CHCl3). Mixt. D (165 mg.) gave 80 mg. IV; a mixt. of 75 mg. IV, 2 ml. Ac2O, and 30 mg. NaOAc refluxed 2 hrs. gave 80 mg. sempervirol acetate (V), m. 92-3.degree., [alpha.]D 51.degree. (c 0.7 CHCl3). Mixt. E (735 mg.) gave 700 mg. torulosal [II, R = CHO, R1 = (CH2)2C(CH:CH2)(OH)Me], [alpha.]D 30.degree. (c 0.5, CHCl3), nD 1.55; **semicarbazone** m. 188.5-90.degree., [alpha.]D -9.degree. (c 1, pyridine). Mixt. F (530 mg.) gave 450 mg. isoagatol [II, R = CHO, R1 = (CH2)2C(:CHCH2OH)Me] (VI); **semicarbazone** m. 156-8.degree., [alpha.]D 20.degree. (c 1, CHCl3). A mixt. of 500 mg. VI, 300 mg. LiAlH4, and ether agitated 0.5 hr. and refluxed 4 hrs. gave 400 mg. agatadiol [II, R = CH2OH, R1 = (CH2)2C(:CHCH2OH)Me] (VII), m. 108-10.degree.. Mixt. G gave 330 mg. torulosol [II, R = CH2OH, R1 = (CH2)2C(CH:CH2)(OH)Me], m. 110-11.degree., [alpha.]D 30.degree. (c 1, CHCl3). Mixt.-gave 180 mg. VII, m. 109-11.degree., [alpha.]D 31.degree. (c 1, CHCl3). A soln. of 65 mg. V in 5 ml. HOAc treated with a soln. of 50 mg. CrO3 and 0.3 ml. 80% HOAc and the mixt. kept 6 days gave 7-oxosempervirol acetate (III, R = H, R1 = AcO, R2 = iso-Pr) (VIII), m. 162-3.5.degree.. VIII (20 mg.) adsorbed on deactivated Al2O3 (treated with 2% water) and the mixt. kept overnight and eluted with MeOH gave 12 mg. 7-oxosempervirol (III, R = H, R1 = OH, R2 = iso-Pr), m. 180-1.degree.. N.M.R., ir, and uv data are given.

L6 ANSWER 43 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1967:514337 CAPLUS

DOCUMENT NUMBER: 67:114337

TITLE: Characteristic features of the chemical composition of the *Cyperus rotundus* rootstock

AUTHOR(S): Akperbekova, B. A.

CORPORATE SOURCE: Detsk. Klin. Bol'nitsa, Baku, USSR

SOURCE: Farmatsiya (Moscow) (1967), 16(3), 36-41

CODEN: FRMTAL

DOCUMENT TYPE: Journal

LANGUAGE:

Russian

AB From air-dried powd. root of the title plant the following fractions were isolated [yield in % given]: alkaloids, 0.21-0.24; cardiac glycosides, 0.62-0.74; flavonoids, 1.25; essential oils, 1.06; resinous compds., 4.21. One alkaloid, 1 cardiac glycoside, and 2 flavonoids were isolated from their resp. fractions. The essential oils, isolated by chromatog. on alumina, were .beta.-selinene, .alpha.-cyperone [**semicarbazone** m. 213-14.degree. (EtOH)], an unidentified ketone, and cyperol and its esters. The resinous substances were fractionated to give 2.50% acidified H₂O-extractable compds., 16.10% waxes and paraffins, 46.03% rubberlike substances, 20.30% **resin acids**, and 14.07% **resin alcs.** Bitter substances, tannins (1.66%), carbohydrates (14.41%), starch (9.2%), pectins (8.72%), fats (2.98%), acids (3.25%), and vitamin C (8.8 mg.%) were also present.

L6 ANSWER 44 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1967:432823 CAPLUS

DOCUMENT NUMBER: 67:32823

TITLE: Nature of diterpenic diol from Larix sibirica
resin

AUTHOR(S): Shmidt, E. N.; Rezvukhin, A. I.; Pentegova, V. A.

CORPORATE SOURCE: Inst. Org. Khim., Novosibirsk, USSR

SOURCE: Khim. Prir. Soedin. (1967), 3(1), 61-2

CODEN: KPSUAR

DOCUMENT TYPE: Journal

LANGUAGE: Russian

GI For diagram(s), see printed CA Issue.

AB The structure of a previously described diol isolated from the neutral part of L. sibirica **resin** and initially identified as larixol was unambiguously detd. to be 13-epitoruzol (I) (from N.M.R. data and by comparison with an original sample). Oxidn. of I with CrO₃ gave an aldehyde, n_D²⁰ 1.5210; **semicarbazone** m. 193-5.degree.. Redn. of I with hydrazine hydrate gave epimanol, m. 38.5-9.5.degree., [.alpha.]₂₀D 50.degree. (c 2.65, CHCl₃). When hydrogenated, I gave tetrahydroepitoruzol m. 77-9.degree., [.alpha.]₂₀D 18.8.degree. (c 2.62, CHCl₃); its oxidn. with CrO₃ in pyridine gave a satd. aldehyde C₂₀H₃₆O₂.

L6 ANSWER 45 OF 45 CAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 1967:421796 CAPLUS

DOCUMENT NUMBER: 67:21796

TITLE: Reactivity of p-methoxybenzylidenecyanoacetic acid with cyclohexanone and its 2- and 4-methylated derivatives

AUTHOR(S): Cordier, Paul; Haietayan, Marie

CORPORATE SOURCE: Fac. Pharmacie Strasbourg, Strasbourg, Fr.

SOURCE: Chim. Ther. (1966), (7), 391-6

CODEN: CHTQAC

DOCUMENT TYPE: Journal

LANGUAGE: French

GI For diagram(s), see printed CA Issue.

AB Anisylidenecyanoacetic acid (I) (10.15 g.) and 10 g. cyclohexanone in 250 ml. H₂O contg. 5 g. NaOH was kept 48 hrs. at 20.degree.. A small amt. of dianisylidenecyclohexanone, m. 160.degree. (EtOH), was filtered off, and the aq. soln. was washed with Et₂O and poured into excess 3N HCl giving 37.5% 4-(p-methoxyphenyl)-8a-hydroxy-2-oxo-3-carboxydecahydroquinoline (II), m. 140.degree. (decompn.). From the aq. acid soln. 6.6% 4-(p-methoxyphenyl)-2-oxo-3-carboxyoctahydroquinoline (III), m. 142.degree., slowly crystallized. II (500 mg.), added slowly to 3 ml. concd. H₂SO₄, kept 15 min., and poured into H₂O, gave III. II or III was heated 4 hrs. at 130.degree., the residue refluxed 0.5 hr. in 95% EtOH in the presence of active C, and the filtered soln. dild. with H₂O to incipient turbidity to give 4-(p-methoxyphenyl)-2-oxooctahydroquinoline, m. 146.degree.. II or III (1 g.) was refluxed 4 hrs. in 5 ml. concd. HCl and 10 ml. AcOH giving 3-(p-methoxyphenyl)-3-(2-oxocyclohexyl)-propionic

acid, m. 105.degree.. Similarly, when 10.15 g. I, 11.2 g. 2-methylcyclohexanone, and 7.5 g. NaOH in 75 ml. H₂O and 50 ml. 95% EtOH was kept 72 hrs. at 20.degree. and the mixt. was washed with Et₂O and poured into 3N HCl, a resinous ppt. was obtained. It was dissolved in Et₂O, the washed soln. was evapd., and the residue taken up in C₆H₆ and kept 3 days, causing the sepn. of some I. The filtrate was evapd., the residue dissolved in Et₂O, and the washed (KHC₂O₃) soln. evapd., leaving 64% of a pale very hygroscopic viscous **resin** which slowly lost CO₂ at room temp. With petroleum ether it became powdery, it strongly decolorized KMnO₄, gave a red color with FeCl₃, and did not give any ketone reactions. With CH₂N₂ it gave a non-crystallizable Me ester, m. apprx. 50.degree.; its analysis agreed with that of a Me 4-(p-methoxyphenyl)-8-methyl-2-oxooctahydroquinoline-3-carboxylate. The free acid (IV) heated 4 hrs. at 90.degree. gave 4-(p-methoxyphenyl)-8-methyl-2-oxooctahydroquinoline, m. 189.degree.. IV (1 g.) refluxed 4 hrs. in a mixt. of 10 ml. AcOH, 5 ml. concd. HCl, and 10 ml. H₂O gave 3-(p-methoxyphenyl)-3-(2-oxo-3-methylcyclohexyl)propionic acid, m. 145.degree. (C₆H₆-petroleum ether). Condensation of 4.06 g. I with 4.4 g. 4-methylcyclohexanone in 40 ml. H₂O and 10 ml. 95% EtOH contg. 0.5 g. NaOH 40 hrs. at 20.degree. gave 33% 4-(p-methoxyphenyl)-8a-hydroxy-2-oxo-3-carboxy-6-methyldecahydroquinoline (V), m. 135.degree. (decompn.) (Et₂O), and 7.5% 4-(p-methoxyphenyl)-2-oxo-6-methyloctahydroquinoline (VI), m. 147.degree. [(Me₂CH)₂O], which was also obtained on heating V 4 hrs. at 140.degree.. V (0.5 g.), treated 10 min. with 2 ml. of a mixt. of 1 ml. concd. H₂SO₄ and 3 ml. AcOH, gave 4-(p-methoxyphenyl)-2-oxo-6-methyl-3-carboxyoctahydroquinoline, m. 150.degree.. Refluxing 2 g. V 4 hrs. in a mixt. of 20 ml. AcOH, 10 ml. HCl, and 10 ml. H₂O gave 3-(p-methoxyphenyl)-3-(2-oxo-5-methylcyclohexyl)propionic acid, m. 142.degree. (**semicarbazone** m. 232.degree.), which is also obtained on like treatment of VI. These condensations take place through nucleophilic addn. of the ketone to the activated double bond of a .delta.-oxonitrile acid which cannot be isolated and which is converted by amide formation and cyclization to a N-contg. hydroxy acid related to decahydroquinoline.